

# Constitution and By-Laws

and

# List of Members

for the

Swedish Engineers' Society of Chicago

Founded October 10, 1908

1913

PRESS OF JACOBSON PRINTING CO. 357 N. CLARK STREET CHICAGO

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ROBERT HVITFELDT MANAGER

# The Swedish Engineers' Society of Chicago

1913



JOHN ERICSSON

### Officers

HENRY ERICSSON, President
G. A. AKERLIND, Secretary
CHARLES A. BOLIN, Treasurer

## Board of Directors

DR. ERNST J. BERG JOHN E. ERICKSON JOHN ERICSON KLAS O. OLSON

ALGOT A. WICKLAND

and the officers

## Lecture Committee

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JOHN ZAHLEN

## House Committee

CHARLES ENGWALL WALTER H. ERICSSON

CARL BERGQUIST
GEORGE NANNFELDT

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HENRY NYBERG, 1908-1909 DR. ERNST J. BERG, 1911 G. A. M. LILJENCRANTZ, 1910 JOHN ERICSON, 1912

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## BY-LAWS

OF

## The Swedish Engineers' Society of Chicago

#### ARTICLE I.

## The Name and Object of the Society.

Section 1. The name shall be The Swedish Engineers' Society of Chicago (Svenska Ingeniörs-Föreningen i Chicago), and its purpose to form a medium for Swedes engaged in engineering science or the industries in Chicago and vicinity and to co-operate with similar organizations in the efforts to promote our advancement.

#### ARTICLE II.

#### Members.

Section 1. The members are divided into five classes: Honorary, Life, Active, Corresponding and Associate.

- Sec. 2. Qualifications. To become a member it is required to be of Swedish descent and to meet the requirements as set forth below.
- Sec. 3. **Honorary Member** shall be a man of prominence in the sciences or industries or who has made himself deserving of the society's highest regard.
- Sec. 3A. Life Member shall be a member of the society who has to the treasury at one time paid the sum of fifty (50) dollars. Such life member shall enjoy all privileges of an active member even if he resides outside of the city of Chicago.
- Sec. 4. **Active Member** shall be one residing in Chicago or vicinity, possessing technical education from some school or college, or who has through self-tuition and ability worked himself up to a position which requires such knowledge.
- Sec. 5. Corresponding Member shall be one residing at a distance from the city of Chicago, where he may have lived at the time of becoming a member of the society and transferred to this group, or may be elected directly into this class, where the requirements are the some as for active members.

NOTE-Article IV Sec. 1-1908-1909 amended.

## **STADGAR**

För

## Svenska Ingeniörs-Föreningen i Chicago

#### KAPITEL.

## Föreningens namn och ändamål.

§ 1. Denna förenings namn skall vara Svenska Ingeniörs-Föreningen i Chicago (The Swedish Engineers Society of Chicago) och dess ändamål att utgöra ett föreningsband mellan svenskar, arbetande i ingeniörs-vetenskapen eller industrien i Chicago med omgifningar, och att samverka med liknande föreningar i sträfvandet för ömsesidigt framåtskridande.

#### KAPITEL H.

#### Medlemmar.

- § 1. Medlemmarne äro fördelade i fem klasser, nämligen: hedersledamöter, lifstids, aktiva, korresponderande och passiva medlemmar
- § 2. **Kvalifikationer**. För att blifva medlem erfordras, att vara af svensk härkomst och att uppfylla de fordringar, som här nedan angifvas.
- § 3. **Hedersledamot** skall vara en man framstående i vetenskapen eller industrien, eller som gjort sig särskildt förtjänt af föreningens högsta erkännande.
- § 3A. Lifstidsledamot är en medlem af föreningen, som på en gång till föreningens kassa inbetalt en summa af femtio (50) dollar. En sådan lifstidsmedlem skall åtnjuta alla de förmåner, som tillkomma aktiv medlem äfven om han är bosatt utom staden Chicago eller dess omgifningar.
- § 4. Aktiv medlem skall vara bosatt i Chicago eller dess omnejd, äga teknisk bildning från något läroverk eller hafva genom själfstudier arbetat sig upp till en ställning, som erfordrar sådana kunskaper.
- § 5. Korresponderande medlem må vara bosatt utom Chicago, hvarest han varit anställd vid sitt inträde i föreningen. ehuru öfverförd till denna klass, eller ock må han inväljas direkt. Fordringarna äro i denna klass för korresponderande medlem desamma som för aktiva.

NOT-Kapitel IV Paragraf 1-1908-1909 ändrad.

- Sec. 6. Associate Member shall reside in the city of Chicago or vicinity as before stated about "Active Member," but does not require the theoretical qualifications of such a member, but have interests in common. To this group may also be elected persons who are interested in the society's progress or who through their position in the community may be expected to aid the aims of the society.
- Sec. 7. Application for membership shall be made on blank, the form of which is determined by the board of directors, and shall contain information on the several points previously enumerated and a declaration that the applicant will abide with the rules and regulations of the society. The applicant shall refer to at least one active member who is acquainted with the applicant and can certify to his desirability as a member.
- Sec. 8. The application shall be submitted to the board of directors, who decide whether the applicant is acceptable or not, and who determines to which class he may be referred.
- Sec. 9. Honorary membership shall be proposed in writing, signed by at least five active members, and shall be submitted to the board of directors, who exercise their discretion in the same manner as in the case of other members.
- Sec. 10. The yearly dues for active members shall be six dollars. Of this three dollars to accompany the application for membership, and will be the payment for six months' dues. In case applicant is not accepted this money shall be refunded.

A corresponding member pays one dollar and an associate member two dollars a year. All dues shall be paid in advance. An honorary member is relieved of any dues to the society.

- Sec. 11. The board of directors shall have the power to relieve any member from paying part or all of his dues when circumstances or the interests of the society are deemed to justify such action.
- Sec. 12. Should a member be delinquent in his duties to the society or conduct himself unworthily, then the board of directors will carefully investigate the matter and act in accordance with the situation. In general the board of directors are to use their best judgment in conducting the society's affairs in cases where specific instructions are lacking in the articles and sections here given.

- § 6. Passiv medlem skall vara bosatt i staden Chicago eller dess omnejd, såsom förut sagts om aktiva medlemmar, men behöfver ej besitta teknisk bildning såsom föreskrifves för dessa, men äga gemensamma intressen med föreningen. Till denna grupp kunna ock inväljas män, intresserade i föreningens framåtskridande, eller hvilka genom sin samhällsställning kunna väntas befrämja föreningens syften.
- § 7. Ansökan till medlemskap skrifves på af direktionen bestämdt formulär, och skall detta innehålla upplysningar rörande förutbeskrifna punkter, jämte en förbindelse att efterlefva föreningens regler. Den sökande skall hänvisa till åtminstone en aktiv medlem, som personligen känner honom och som kan intyga den sökandes önskvärdhet såsom medlem.
- § 8. Ansökan skall öfverlämnas till direktionen, hvilken tager i öfvervägande huruvida den sökande är önskvärd eller icke och bestämmer den klass, till hvilken den sökande skall hänföras.
- § 9. Hedersledamotskap skall skriftligen föreslås till direktionen, undertecknadt af minst fem aktiva medlemmar. Direktionen behandlar därpå denna ansökan på samma sätt som öfriga ansökningar.
- § 10. Årsafgiften för aktiv medlem skall vara sex dollar. Häraf skall hälften åtfölja inträdesansökan och skall utgöra sex månaders afgift. Antages ej den sökande, så skola dessa penningar återlämnas. Korresponderande medlem betalar en dollar om året och passiv medlem två dollar. Alla afgifter betalas i förskott. Hedersledamöter äro befriade från afgifter till föreningen.
- § 11. Direktionen skall äga rättighet att fritaga medlem från att betala en del eller hela afgiften, då omständigheterna eller föreningens intressen anses berättiga sådant.
- § 12. Skulle medlem försumma sina skyldigheter gentemot föreningen eller uppföra sig ovärdigt, skall direktionen noga undersöka förhållandet och handla i öfverensstämmelse med situationen. Direktionen äger att efter bästa omdöme sköta föreningens affärer i sådana fall, för hvilka ej instruktioner förefinnas i dessa stadgar.

#### KAPITEL III.

## Tjänstemän.

§ 1. Tjänstemännen för denna förening skola hålla sina respektiva ämbeten under en period af ett år. De skola väljas

#### ARTICLE III.

#### Officers.

Section 1. The officers of this society shall hold office for one year. They shall be elected at the December regular meeting, and shall continue in office until the new officers have qualified at the January meeting.

The officers shall consist of:

- Sec. 2. A president, who shall preside at the meetings and perform the duties pertaining to a presiding officer. He shall also be the chairman ex-officio of any committee he may appoint and whose meetings he may attend.
- Sec. 3. A vice president, who shall, in the absence of the president, perform all duties required of that officer.
- Sec. 4. A secretary, who shall attend to the official correspondence of the society, receive applications for membership and keep records of the meetings and all official transactions.
- Sec. 5. A treasurer, who shall, under direction of the board of directors, collect dues and pay bills with check on a Chicago bank and keep books of all such transactions, enabling the board of directors at any time to determine the society's financial standing. If the board of directors so desire the treasurer shall give security for money in his charge.
- Sec. 6. The board of directors consists of the officers and five additional active members elected as stated in Article V, Section 1.
- Sec. 7. The president, as chairman of the board of directors, shall call meetings of the board whenever deemed desirable, and shall together with the board establish such rules and regulations for the society's headquarters, when such exist, as they deem proper, and shall with the board exercise a general supervision over the society's affairs. At the request of three members of the board of directors an extra meeting may be called.
- Sec. 8. All officers and members of the board of directors shall be elected from the active members of the society.
- Sec. 9. **Standing Committees.** The incoming president shall at the annual meeting appoint a committee on lectures and a house committee. The committee on lectures shall consist of four members whose duties it shall be to arrange for reading of papers, to lead discussions and to otherwise contribute in making the meetings interesting. The house committee shall consist of four members. This committee shall have charge of the society's property, arrange for quarters and entertainments, etc.

vid det ordinarie Decembermötet och skola kvarstå i tjänsten till dess de nya tjänstemännen blifvit installerade vid Januarimötet.

Tjänstemännen skola utgöras af:

- § 2. En president, som skall vara ordförande vid föreningens möten och sköta alla de åligganden som tillhör denna tjänsteman. Han skall ock vara ordförande ex-officio vid de möten han må bevista af de kommittéer han tillsatt.
- § 3. En vice president, som vid presidentens frånvaro sköter dennes åligganden.
- § 4. En sekreterare, som skall sköta föreningens korrespondens, mottaga medlemsafgifter och betala räkningar med check på någon bank i Chicago samt noga bokföra alla sådana transaktioner och därigenom sätta direktionen i stånd att när som helst göra sig underrättad om föreningens finansiella ställning. Om direktionen anser nödigt, skall skattmästaren ställa säkerhet för omhänderhafda medel.
- § 6. Direktionen består af tjänstemännen och fem aktiva ledamöter, invalda enligt Kapitel V, paragraf 1.
- § 7. Presidenten, såsom ordförande för styrelsen, skall sammankalla dess medlemmar närhelst ett möte anses önskvärdt, och skall tillsammans med styrelsen etablera sådana regler och förordningar för föreningens hufvudkvarter, då sådant finnes, som de anse lämpliga och skall tillsammans med direktionen utöfva tillsyn öfver föreningens affärer. Ett extra möte må sammankallas om minst tre medlemmar af direktionen framställa begäran därom.
- § 8. Alla tjänstemän och medlemmar af direktionen skola väljas bland de aktiva medlemmarne i föreningen.
- § 9. Stående kommittéer. Den inkommande presidenten skall vid årsmötet utnämna en kommitté af fyra medlemmar med skyldighet att arrangera föredrag, leda diskussioner och på annat sätt göra mötena intressanta. Äfven skall presidenten vid detta tillfälle utnämna en "hus-kommitté", som skall bestå af fyra medlemmar, och hvars skyldighet skall vara att hafva uppsyn öfver föreningens tillhörigheter och att arrangera för mötesplats och underhållningar o. s. v.

#### ARTICLE IV.

#### Meetings.

- Section 1. The regular meeting of the society shall be held each month at such hour and at such place as may be determined upon. Five active members shall constitute a quorum for transaction of business. Extra meetings may be called by the president, if deemed necessary, the reason for such meetings to be set forth in the call and only such business transacted as stated in the notice to assemble.
- Sec. 2. The annual meeting shall be the first regular meeting in January.
- Sec. 3. Members have the privilege to invite friends to the meetings.
  - Sec. 4. Robert's Rules of Order to govern.

#### ARTICLE V

#### Election.

- Sec. 1. Election shall be held at the regular meeting in December, and shall be by informal written ballot for nomination, to be followed by formal ballot for election. Only the two candidates receiving the highest number of votes on the informal ballot shall be voted upon in the formal ballot. Members of the board of directors are elected together on one ballot for a period of two years. Of those not officers elected in December, 1910, two are to serve one year and three to serve two years. Should any officer or member of the board of directors be incapacitated to serve, then the board of directors is empowered to fill vacancy with the appointment of an active member until the regular election (in December).
  - Sec. 2. Only active and life members are entitled to vote.

#### ARTICLE VI

#### Amendments.

Section 1. These by-laws may be amended at any regular meeting of the society by a two-thirds vote of the active members present and voting, said amendment having been proposed in writing at a previous regular meeting.

#### ARTICLE VII.

## Dissolution of the Society.

Section 1. Should the number of active members fall below fifteen, a proposition may be entertained to disband, but this must

#### KAPITEL IV.

#### Möten.

- § 1. Föreningens ordinarie möte skall hållas hvarje månad på tid och rum enligt öfverenskommelse. Fem aktiva medlemmar erfordras vid möte för besluts fattande. Extra möte må utlysas af presidenten, om sådant anses nödvändigt. Skälet för sådant möte måste framställas i kallelsen och endast det eller de ärenden, som i densamma angifvits, kunna å ett extra möte upptagas till behandling.
  - § 2. Årsmöte skall vara det första ordinarie mötet i Januari.
- § 3. Medlem äger förmånen att inbjuda vänner till föreningens möten.
  - § 4. Roberts regler (Robert's Rules of Order) skola följas.

#### KAPITEL V.

#### Val.

- § 1. Val hålles vid det ordinarie mötet i December, och skall ske genom en förberedande skrifven valsedel för att bestämma de kandidater, mellan hvilka det slutliga valet verkställes. Endast de två kandidater, hvilka erhålla det största antalet röster i den förberedande röstningen, kunna förekomma i den slutliga röstningen. Medlemmar af direktionen icke tjänstemän, väljas på en gemensam valsedel för en period af två år. Vid valet i December 1910 väljes två medlemmar att tjäna ett år och tre att tjäna två år. Skulle någon tjänsteman eller medlem af direktionen bli urståndsatt att tjänstgöra, äger direktionen att utnämna en aktiv medlem att fylla platsen tills det ordinarie valmötet.
- § 2. Endast aktiva- och lifstidsmedlemmar äro berättigade att deltaga i valet.

#### KAPITEL VI.

## Ändring af stadgarna.

§ 1. Förslag till ändring eller tillägg till dessa stadgar må skriftligen anmälas vid ett ordinarie möte och två tredjedelars majoritet af de afgifna rösterna erfordras vid det påföljande mötet för att antaga ett sådant förslag.

#### KAPITEL VII.

## Föreningens upplösning.

§ 1. Skulle antalet aktiva medlemmar blifva mindre än femton må skriftligt förslag framställas om föreningens upplösning och extra möte utlysas, ej tidigare än sex dagar efter sådan be made in writing and an extra meeting be called not earlier than six days after the issuance of such notice, and no other business to be transacted at such meeting. A majority of four-fifths of the votes cast shall be necessary to dissolve the society. In such case a history of the society should be written and, together with documents, correspondence and the gavel, or other relics and valuables the society may possess, be deposited with the Swedish Historical Society of America, or if this should not exist at the time of dissolution or not be able to take care of the property turned over, then the Swedish Societies' Old People's Home Association of Cook County, Illinois, should be requested to take into safe keeping all the belongings until another Swedish Engineers' Society may be formed in the city of Chicago.

#### ARTICLE VIII.

#### Order of Business.

The order of business shall be as follows:

- 1. Call to order by the president.
- 2. Reading of the minutes.
- 3. Report of board of directors.
- 4. Reports of standing and special committees.
- 5. Unfinished business.
- 6. New business.
- 7. Reading of papers and discussion of same.
- 8. Adjournment.



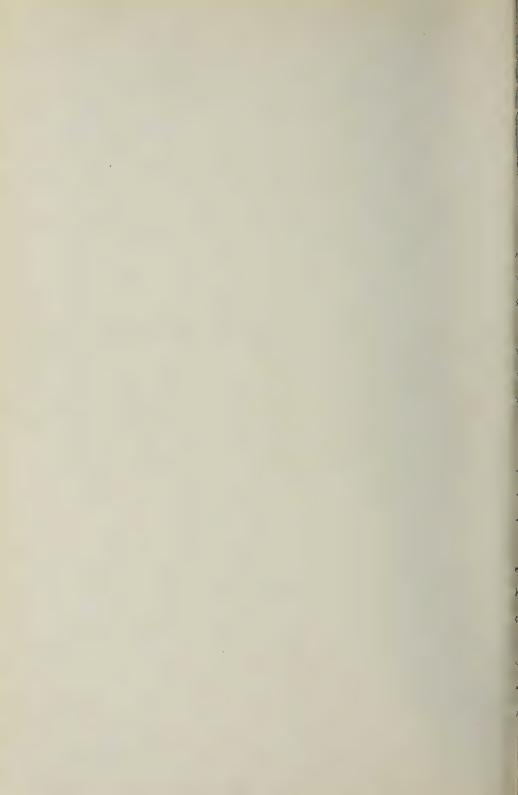
kallelse. På detta möte må ej något annat ärende behandlas. Fyra femtedelar af de afgifna rösterna äro erforderliga för föreningens upplösning. I sådan händelse skall föreningens historia skrifvas och tillika med andra dokument, korrespondens, ordförandeklubba och andra reliker och värdesaker, föreningen må äga, deponeras hos det Svenska Historiska Sällskapet af Amerika, eller, om detta sällskap vid föreningens möjliga upplösning ej längre skulle existera eller ej vara i stånd att tillvarataga kvarlåtenskapen, The Swedish Old People's Home Association of Cook County, Illinois, anmodas att taga i förvar alla föreningens tillhörigheter till dess en ny svensk ingeniörsförening må uppstå i Chicago.

#### KAPITEL VII.

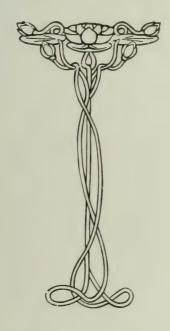
## Dagordning vid ordinarie möten.

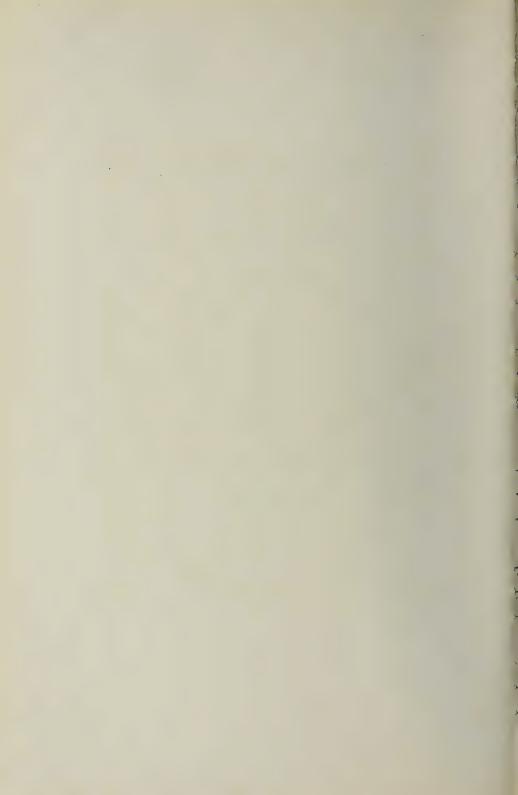
- 1. Mötet öppnas af ordföranden.
- 2. Protokoll öfver föregående mötes förhandlingar.
- 3. Rapport af direktionen.
- 4. Rapport af permanenta och speciella kommittéer.
- 5. Oafslutade ärenden.
- 6. Nya ärenden.
- 7. Föredrag och diskussion.
- 8. Afslutning.





# List of Members

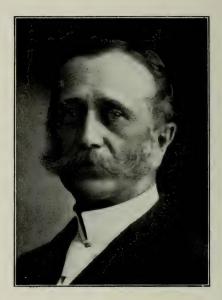






HENRY ERICSSON

President of The Swedish Engineers' Society of Chicago 1913



Still Siegeneraus.

GUSTAF A. M. LILJENCRANTZ, C. E.,

Honorary Member

President S. E. S. of C., 1910. The Royal Institute of Technology, Stockholm, Sweden. Graduated 1866. Assistant Engineer, U. S. Engineer Office, 510 Federal Building, Chicago, Ill. Residence, 627 Groveland Park, Chicago.



Albarton

DR. ANTON JULIUS CARLSON, Honorary Member

Professor of Physiology, University of Chicago. Residence, 5228 Greenwood Ave., Chicago.



#### ALBERT B. ACKANDER,

Charter Member

Wisby, Sweden.

Residence, Ocean Springs, Mississippi.



#### TORE M. R. ADLER, M. E.,

Active Member

Stockholm Technical School, 1902. Designer, Atchison, Topeka & Santa Fe R. R. Railway Exchange Building. Residence, 6329 Ellis Ave., Chicago.



#### G. A. F. AHLBERG, M. E.,

Active Member

The Royal High School of Technology, Stockholm, Sweden, 1889. Residence, 1810 Wisconsin St., Racine, Wis.



#### B. E. AHLSKOG, C. E.,

Active Member

The Technical High School of Helsingfors, Finland, 1902. Monadnock Building, Chicago. Residence, 6221 Monroe Ave., Chicago.



#### ALFONS AHNGER,

Active Member

Helsingfors Technical School, 1905. Designer, Carter White Lead Company, Chicago. Residence, 6112 Washington Ave., Chicago.



#### GUSTAF A. AKERLIND, M. E.,

Charter Member, Life Member

Secretary 1908-9-10-11-12-13. Stockholm Technical School, 1885. Inspecting Engineer City Engineer's Office, Department of Public Works, City Hall, Chicago. Residence, 3618 Lexington St., Chicago.

M. E.-Mechanical, C. E. -Civil. E. E. Electrical Engineer; Architect; B. E. -Building Engineer, Chemist; Mining Engineer; F. P. E. -Fire Protection Engineer; N. A. - Naval Architect



JOHN A. AKERLIND, C. E.,

Corresponding Member

Stockholm Technical School, 1888. Constructor and Builder of Power Plants, Sulfite Mills, Paper Mills, Etc. Residence, Hedemora, Sweden.



HENRY ALINDER, M. E.,

Active Member

Stockholm Technical School.

Designer, Allis Chalmers Co., Chicago.
Residence, 825 N. Pine Ave., Chicago.



CARL A. ALZEN, F. P. E.,

Charter Member

Fire Protection Engineer. With Royal Insurance Co., 160 Jackson Blvd., Chicago, Illinois. Residence, 5240 Kenmore Ave., Chicago.



CLARK G. ANDERSON, C. E.,

Corresponding Member
University of Illinois, 1898.

Commissioner Streets and Public Improvements. Moline, Ill.



#### H. A. ANDERSON, M. E.,

Active Member

Malmö Technical School.

Central Iron Works, 263-265 W. Lake St.

Residence, 1926 Oakdale Ave., Chicago.



CARL F. ANDERSON, M. E.,

Active Member

Laholm, Sweden.

Manufacturer, 2024 S. Morgan St., Chicago. Residence, 1612 Clifton Park Ave., Chicago.

NOTE-Charles B. Anderson, see last page.



#### JOHN FRANCIS ANDERSON, C. E.,

Corresponding Member

Jemshög, Blekinge, Sweden. Bridge Builder, Retired. Residence, San Diego, California.



#### SWEN AXEL, E. E.,

Active Member

Stockholm Technical School, Sweden. Engineer, Electro-Magnetic Tool Co., Chicago. 115 S. Clinton St., Chicago, Ill. Residence, 1103 Winona St., Chicago.



#### C. G. AXELL, M. E., E. E.,

Active Member

Vice President 1911.
The Royal High School of Technology,
Stockholm, Sweden, 1902.
Assistant Engineer, Engineering Department,
Commonwealth Edison Co., 28 N. Market St.
Residence, 3732 Racine Ave., Chicago, III.



#### MARTIN BALCHER, M. E.,

Charter Member

Malmö Technical School, 1904. Designer, Blomfeldt & Rapp, 108 N. Jefferson St. Residence, 1926 Oakdale Ave., Chicago.



#### HANS J. E. BANCK, M. E.,

Corresponding Member

Chalmers Institute of Technology, 1909. Allis Chalmers Co., Steam Engine Department, Milwaukee, Wis. Residence, 3704 Galena St., Milwaukee, Wis.



#### DR. ERNST J. BERG, M. E., E. E.,

Life Member

President, 1911.
The Royal High School of Technology,
Stockholm, Sweden, 1892.
Doctor of Science, Union University, 1909.
Professor in Charge of Department of Electrical
Engineering, University of Illinois, Urbana, Ill.



GUSTAV BERG, M. E.,

Corresponding Member

Stockholm, Sweden.

Residence, 28 Bergsgatan, Stockholm.



G. T. BERG, M. E.,

Corresponding Member

Falu Bergsskola, Sweden, 1903.

Residence, Kopparberg, Sweden.



#### THEODORE A. BERGEN, E. E.,

Active Member

Chalmers Institute of Technology. Chief Electrical Engineer with Lockwood, Greene & Co., Chicago. Residence, 5427 Lexington Ave., Chicago, Ill.



#### GOTTFRID BERGENDORF, M. E.,

Active Member

Manager and Superintendent, The Smith Mfg. Co., De Kalb and Chicago, Ill. Residence, 433 College Ave., De Kalb, Ill.



#### AXEL E. BERGGREN, M. E.,

Corresponding Member

Marshalltown, Iowa.

Iowa State College, Ames, Iowa, 1908.

Instructor in Mechanical Engineering,
Wisconsin University, Madison, Wis.



#### MAJOR ERIC BERGLAND,

Corresponding Member

Major Corps of Engineers, United States Army. Retired.

P. O. Box 30, Baltimore, Md.



ALGOT E. BERGLOF, M. E.,

Corresponding Member

Residence, Raggegatan 4, Strängnäs, Sweden.



CARL BERGQUIST, Chemist,

Active Member

The Royal High School of Technology, Stockholm, Sweden, 1901. Chemist with Stein, Hirsh & Co., Chicago. Residence, 217 E. 31st St., Chicago.



#### J. G. BERGQUIST, Chemist,

Charter Member , Life Member

Works Manager, Universal Portland Cement Co.. Buffington, Indiana. Residence, 4920 Greenwood Ave., Chicago.



#### B. H. BERGSTROM, M. E.,

Active Member

örebro Technical School, 1908. Draftsman, Marsh- Capron Mfg. Company, Chicago Heights, Ill.



#### CHAS. H. BIRCH, M. E.,

Active Member

Norrköping, Sweden. Designer with H. W. Caldwell & Son, 17th and Western Ave., Chicago, Ill. Residence, 2742 Racine Ave., Chicago.



#### E. E. BIRKLAND, M. E.,

Active Member

Falu Bergsskola, Sweden, 1902. Designer, Crane Company, Chicago. Residence. 1830 North Park Ave., Chicago.



## K. GUSTAF A. BJURSTROM, M. E., Charter Member

Treasurer, 1911.
Örebro Technical School, Sweden, 1903.
Assistant Chief Draftsman, Locomotive Department, Chicago & North-Western Railway,
West 42nd and Kinzie Sts.
Residence, 2241 Giddings Ave., Chicago.



## G. W. BJORKSTEDT, Electro-Metallurgical Engineer, Corresponding Member

The Royal High School of Technology, Stockholm, Sweden, 1907. Manager Electric Furnace Dept., Siemens & Halske, A. G., 90 West St., New York City. Residence, 3 Montague Terrace, Brooklyn, N. Y.



#### THOR BJÖRNBOHM, E. E.,

Corresponding Member

The Royal High School of Technology, Stockholm, Sweden, 1904 Residence, Högbergsgatan 54, Stockholm, Sweden



#### P. A. BLOMFELDT, M. E.,

Active Member

Manufacturer, 108 N. Jefferson St., Chicago. Residence, 6523 Perry St., Chicago.



#### WM. G. BLOMSTRAN, M. E.,

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# CONSTITUTION and BY-LAWS

OF

# The Swedish Engineers' Society of Chicago

#### ARTICLE I.

## Name and Object of the Society.

Section 1. The name of the Society shall be "The Swedish Engineers' Society of Chicago."

Sec. 2. The object of the Society shall be to promote knowledge, advancement and co-operation among the technical men of Swedish descent engaged in engineering and industrial operations in Chicago and vicinity.

#### ARTICLE II.

# Membership.

- Sec. 1. The members shall be divided into five classes: Honorary, Life, Active, Corresponding and Associate.
- See. 2. Qualifications. To become a member it is required to be of Swedish descent and to meet the requirements as set forth below.
- See. 3. An Honorary Member shall be a man of prominence in the sciences or industries, who has made himself deserving of the Society's highest regard.
- Sec. 4. **A Life Member** shall be an active or corresponding member of the society who has to the treasury at one time paid the sum of Fifty (50) Dollars. Such life member shall enjoy all privileges of an active member.
- Sec. 5. An Active Member shall be one possessing technical education, from some school or college, or shall be one who, through self-tuition and ability, has worked himself up to a position which requires engineering knowledge.
- Sec. 6. A Corresponding Member shall be residing at a distance of at least forty (40) miles from the City of Chicago. The requirements shall be the same as for an active member. The transfer of an active member to this group shall be made semi-annually.
- Sec. 7. An Associate Member shall be one who cannot qualify as active or corresponding, but who is interested in the Society's activities and who may, by his position in the community, be expected to aid the aims of the Society.

## ARTICLE III.

## Admissions and Expulsions.

- Sec. 1. Application for membership shall be made on blank, the form of which is determined by the Board of Directors, and shall contain information on the several points previously enumerated and a declaration that the applicant will abide with the rules and regulations of the Society. The applicant shall refer to at least two members who are acquainted with the applicant and can certify to his desirability as a member.
- Sec. 2. The application must be accompanied by an admission fee of two (2) dollars and shall be submitted to the Secretary, who shall post the name of the candidate and proposers on the bulletin board for at least one week. The Board of Directors shall then decide whether the applicant is acceptable or not, and shall determine to which class he may be referred. If the applicant is not accepted the admission fee shall be refunded.
- Sec. 3. An honorary member shall be proposed in writing, which shall give the reasons for the proposal and shall be signed by at least ten active members in good standing. He shall be elected only by unanimous vote of the entire Board of Directors, after the name of such candidate has been posted in the regular way. The voting to be done by letter ballot if necessary.
- Sec. 4. Membership of any person shall date from the date of his election. A rejected applicant may renew his application for membership at any time after the expiration of one year from the date of the ballot rejecting his previous application.
- Sec. 5. A member of the Society may resign his membership by a written communication to the Secretary, who shall present the same to the Board of Directors, who shall accept his resignation, if all his dues have been paid.
- Sec. 6. Upon a written request of ten or more active members in good standing, giving cause therefore, a member of the Society may be expelled by the Board of Directors, if there appears to be sufficient reason. The accused member shall first be advised of the charges against him and given an opportunity for defense. If expulsion is found justified, the member shall be notified, but unnecessary publicity should be avoided.

## ARTICLE IV.

#### Dues.

- Sec. 1. The yearly dues for an active member shall be six (6) dollars. The yearly dues for a corresponding member shall be two (2) dollars if residing in the United States or Canada, and shall be one dollar if residing in other countries. The yearly dues for an associate member residing within forty (40) miles of the City of Chicago shall be four (4) dollars. The yearly dues for an associate member residing forty (40) miles or more from the City of Chicago shall be two (2) dollars. All dues shall be paid in advance. An honorary member shall be exempt from payment of dues.
- Sec. 2. Any person whose dues are more than six months in arrears shall be notified by the Secretary or Treasurer. Should his dues become nine (9) months in arrears, he shall lose his right to vote and to receive the Society's publications, and should his dues become one year in arrears, he shall forfeit his connection with the Society. The Board of Directors, however, may for cause deemed sufficient, extend the time for payment and may relieve any member from paying part or all of his dues when circumstances or the interests of the Society are deemed to justify such action.

#### ARTICLE V.

#### Officers.

- Sec. 1. The officers of the Society shall be as follows:
- Sec. 2. A President, who shall preside at the meeting and perform the duties pertaining to a presiding officer. He shall also be the chairman ex-officio of any committee he may appoint and whose meetings he may attend.
- Sec. 3. A Vice President, who shall, in the absence of the president, perform all duties required of that officer.
- Sec. 4. A Secretary, who shall attend to the official correspondence of the Society, receive applications for membership and keep records of the meetings and all official transactions.
- Sec. 5. A Treasurer, who shall, under direction and approval of the Board of Directors, handle all funds of the Society, collect

dues and pay bills with check on a Chicago bank and keep books of all such transactions, enabling the board of directors at any time to determine the Society's financial standing. The Treasurer shall be bonded in a surety company at the expense of the Society.

- Sec. 6. The Board of Directors shall consist of the officers and five additional active members elected as stated in Article VI.
- Sec. 7. The President, as chairman of the Board of Directors, shall call meetings of the board whenever deemed desirable, and shall, together with the board, establish such rules and regulations for the Society's headquarters, when such exist, as they deem proper, and shall, with the board, exercise a general supervision over the Society's affairs. At the request of three members of the Board of Directors the President shall also call a meeting.
- Sec. 8. Standing Committees. The incoming President shall, at the annual meeting, appoint a Committee on Lectures, a House Committee and a Library Committee. The Committee on Lectures shall consist of three members, whose duties it shall be to arrange for the reading of papers, to lead discussions and to otherwise contribute in making the meetings interesting. The House Committee shall consist of three members. This committee shall, under supervision of the Board of Directors, have charge of the Society's property, arrange for quarters and entertainments, etc., but must not incur greater expences to the Society than given by written authority from the Board of Directors. The Library Committee shall consist of three members. This committee shall have supervision over the Society's library, receive books, magazines and pamphlets, shall list same and shall submit to the Board of Directors estimates of expenses desirable to extend and maintain the library.
- See. 9. Special Committees and the Appropriation of Money. A proposition to appoint such a committee or to appropriate money shall be presented at a regular meeting of the Society, and, if sustained, the Board of Directors shall take the proposition under advisement and decide whether the object is justified and if the necessary expenses can be met by the Society. In such case, the board will select a committee and give it instructions as to the scope of its work and the amount of money available for the purpose. A two-third majority of the Board shall be required to decide, the votes to be east by letter ballot if necessary.

#### ARTICLE VI.

## Nomination and Election of Officers.

Sec. 1. The President, Vice President, Secretary, Treasurer and the Directors shall be elected from the active or life members, in the month of December annually. The officers shall hold office for one year and the directors two years. Three directors shall be elected in the even years and two in odd years.

The term of office of each officer shall begin at the close of the annual meeting in January for the year for which he was elected, and shall continue for the period above named or until a successor is duly elected. Should any officer or member of the board of directors be unable to serve, such vacancy shall be filled by a life or active member elected by the board of directors.

- Sec. 2. There shall be a Nominating Committee composed of six (6) members of the Society, three of which shall be appointed by the Board of Directors and three of which shall be elected annually when the officers of the Society are elected. This committee shall elect their own chairman. It shall be the duty of this committee to meet in the early part of November of each year and nominate the candidates for officers and directors named in Article V.
- Sec. 3. The three elective members of the nominating committee shall be nominated and elected at the regular December meeting of the Society.
- Sec. 4. The Secretary shall mail, on or before the last Thursday in November of each year, to each member entitled to vote, a ballot containing the names of the nominated candidates for the several offices falling vacant. Under the names of the nominees for each office so printed there shall be provided a space for the use of the voter if he desires to substitute another name. The voter shall enclose said ballot in an envelope and seal the same. He shall then enclose the sealed envelope in a second envelope marked "Ballot," seal the same, and shall then write his name thereon for identification. The ballot thus prepared and enclosed shall be mailed or delivered unopened to the Secretary of the Society. The Secretary or Treasurer shall certify to the competency and signature of all voters. A ballot without the autographic endorsement of the voter written on the outside envelope shall be marked "defective."

Sec. 5. All ballots shall be transmitted by the Secretary unopened to the presiding officer of the December meeting. The presiding officer shall then declare the election closed and shall appoint three tellers who shall first destroy all the defective ballots unopened. They shall then open and destroy the endorsed outer envelopes marked "Ballot," and then open the inner envelope and count the votes. The opening of both the outer and inner envelopes as well as the counting of the votes shall be done in open meeting after the election is closed. A ballot which contains more names than there are offices to be filled is thereby made "Defective," and shall be rejected by the tellers. The tellers shall certify the results of the voting to the presiding officer who shall then announce the candidates having the greatest number of votes for their respective offices and declare them elected for the ensuing year. A tie vote shall be decided through revoting by the voters present.

Sec. 6. Questions of vital interest to the policies and existence of the Society, shall be submitted in writing at a regular meeting of the Society, and may be, by a majority vote of the members present at such meeting, ordered to be presented for a special ballot to be cast at the next regular December meeting. This ballot shall briefly state the pro and con of the question. "Yes" or "No" should be voted and the ballot enclosed in the same envelope as that containing the official ballot. A two-third majority of the votes cast shall be necessary to carry the question.

#### ARTICLE VII.

## Meetings.

Sec. 1. The regular meeting of the Society shall be held each month at such hour and at such place as may be determined upon. Ten active members in good standing shall constitute a quorum for transaction of ordinary business, with the limitations as stated in Art. V, Sec. 9, but questions of vital importance to the Society shall be submitted to letter ballot as described in Article VI, Section 6.

Extra meetings may be called by the President on his own initiative or if petitioned by at least ten active members in good standing, who shall sign such petition and state the object of the meeting. At such extra meeting only such business shall be transacted as stated in the notice to assemble.

- Sec. 2. The annual meeting shall be the first regular meeting in January.
- Sec. 3. Members have the privilege to invite friends to the meetings.
  - Sec. 4. "Roberts' Rules of Order" to govern.

## ARTICLE VIII.

## Permanent Funds.

The Commonwealth Edison first mortgage 5% gold bond No. 18095 of one thousand dollars par value and maturing in 1943 shall be held by the Treasurer of the Society and only the interest thereof shall be used for current expenses. To this permanent fund shall be added the dues for life membership and such sums as the board of directors from time to time may decide to add. This permanent fund shall not be drawn upon unless decided upon in the following manner: The proposition shall be presented in writing at a regular meeting at least three months before the annual election, and may, by a majority vote of the members present at such meeting, be ordered to be presented for a special ballot to be cast at the next regular December meeting. This ballot shall briefly state the pro and con of the proposition. A two-third majority of the votes cast shall be necessary to carry the proposition.

#### ARTICLE IX.

#### Amendments.

Proposed amendments to this constitution must be reduced to writing and signed by at least ten active members in good standing, and shall be submitted to the Board of Directors, who shall have the petition with the names of the petitioners and the proposed amendment printed with the call for a regular meeting of the Society. Should such a meeting by a two-thirds majority vote recommend the amendment as proposed or as amended by the meeting, then the questions shall be submitted to a "Special Ballot." Such ballot to contain brief statement of the reasons for the change pro and con. A two-thirds majority of the votes cast shall be necessary to carry the amendment.

Amendments so adopted shall take effect immediately after the next annual meeting in January.

#### ARTICLE X.

## Dissolution of the Society.

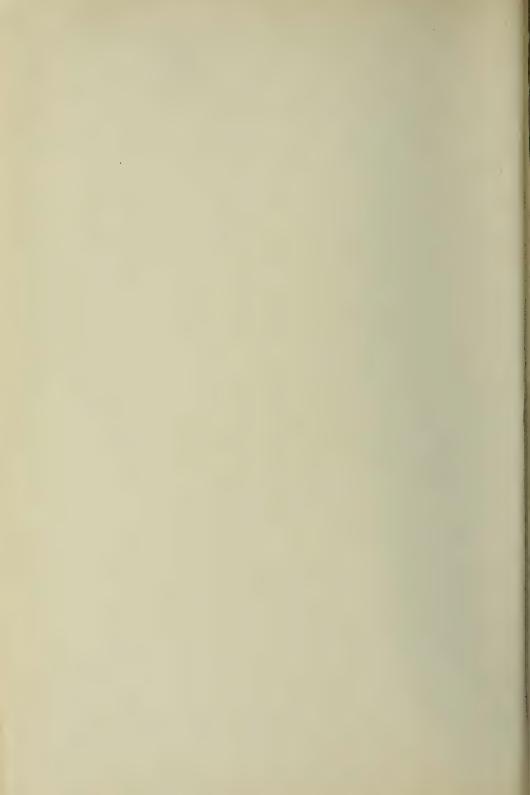
- Sec. 1. Should the number of active members fall below twenty, a proposition may be entertained to disband, but this must be made in writing and addressed to the Board of Directors. An extra meeting shall then be called not earlier than six (6) days after the issuance of such notice, and no other business shall be transacted at such meeting.
- Sec. 2. Should the meeting so held by a two-thirds majority decide on dissolution, then the question shall be submitted to all voting members by letter ballot and a two-third vote of all active and life members shall be necessary for the dissolution of the Society.
- Sec. 3. A history of the Society shall then be written, and, together with documents, books, correspondence and the gavel, or other relics and valuables the Society may possess, be deposited with the Swedish Historical Society of America, or, if this Society should not exist at the time of the dissolution or not be able to take care of the property turned over, then the Swedish Societies' Old People's Home Association of Cook County, Illinois, should be requested to take into safe-keeping all the belongings until another Swedish Engineers' Society may be formed in the City of Chicago.
- Sec. 4. Should any funds belonging to the Society be in existence at the time of dissolution, such funds and money shall be turned over to the party taking custody of the Society's property as a compensation for services to be rendered.

## ARTICLE XII.

## Order of Business.

The order of business shall be as follows:

- 1. Call to order by the President.
- 2. Reading of the minutes.
- 3. Report of Board of Directors.
- 4. Reports of Standing and Special Committees.
- 5. Unfinished business.
- 6. New business.
- 7. Reading of papers and discussion of same.
- 8. Election of officers (at the December meeting).
- 9. Adjournment.



### THE SWEDISH ENGINEERS' SOCIETY OF CHICAGO



JOHN ERICSON
President of The Swedish Engineers' Society of Chicago 1914



AlCarlson

CARLSON, ANTON JULIUS, DR., Honorary Member.
Professor of Physiology, University of Chicago.
Res., 5228 Greenwood Ave., Chicago, Ill.



Istell Siegenerand.

LILJENCRANTZ, G. A. M., Charter Member, Honorary Member.
Asst. Eng., U. S. Engineer Office, Chicago, Ill.
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# Members 1914

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- OLSON, CARL E., Active Member.
  With Western Electric Company, Hawthorne, Ill.
  Res., 2216 W. Monroe St., Chicago, Ill.
- OLSON, E. W., Associate Member. Editor, with Augustana Book Concern. Res., 3900 Eighth Ave., Rock Island, Ill.
- OLSON ERNEST M., Active Member.
  With Western Electric Company, Hawthorne, Ill.
  Res., 4214 N. Ashland Ave., Chicago, Ill.
- OLSON, JNO. O., Corresponding Member. Chief Engineer, Lee Electric Co., Clarinda, Iowa. Res., 1406 Chestnut St., Clarinda, Iowa.
- OLSON, KARL E., Active Member.

  Chemist, Goldschmidt Detinning Co., East Chicago, Ind.

  Res., 1105 Beacon St., East Chicago, Ind.
- OLSON, KLAS O., Active Member.

  Building Superintendent.

  Res., 4703 Lincoln Ave., Chicago, Ill.
- ONGMAN, CLARENCE S., Active Member.

  Foreman, Water Pipe Extension, City Hall, Chicago, III.

  Res., 4526 N. Albany Ave., Chicago, III.

## OSTERGREN, HARRY, Active Member.

Fire Prevention Engr., Chicago, Ill. Res., 3265 Cottage Grove Ave., Chicago, Ill.

#### OSTERGREN, K. O., Active Member.

With Marquette Piano Company, Chicago, Ill. Res., 2939 Vernon Ave., Chicago, Ill.

### CSTERGREN, ROBERT C., Active Member.

Architect, Asst. Prof., Armour Inst. of Tech., Chicago. Res., 2939 Vernon Ave., Chicago, Ill.

## ÖSTLIN, OLOF, Corresponding Member.

Mechanical Engineer, Bolinders Mekaniska Verkstäder, Stockholm, Sweden.

#### PALMQUIST, THURE, Active Member.

Res., 1430 N. Clark St., Chicago, Ill.

#### PARKE, PETER, Active Member.

Chief Engineer, Pullman Company, Chicago, Ill. Res., 5706 S. Peoria St., Chicago, Ill.

#### PEARSON, HAROLD, Active Member.

With Universal Portland Cement Co., Buffington, Ind. Res., 7115 St. Lawrence Ave., Chicago, Ill.

#### PETERSON, CARL M., Active Member.

Chief Engineer, U. S. Post Office Bldg., Chicago, Ill. Res., 7523 Ingleside Ave., Chicago, Ill.

#### PETERSON, C. S., Active Member.

Director, Hemlandet Publishing Co., Chicago, Ill. Res., 757 Buena Ave., Chicago, Ill.

#### PETERSON, FRANK A., Active Member.

Surveyor.

Res., 824 Leland Ave., Chicago, Ill.

#### PETTERSON, HUGO, Corresponding Member.

Contr. Engineer, Mt. Vernon Bridge Company. Res., 506 E. Gambier St., Mt. Vernon, Ohio. PETTERSON, HJALMAR, Corresponding Member.
. With Finland State Railway, Helsingfors, Finland.
Res., Borgagatan 21, Helsingfors, Finland.

RANDEL, IVAR A., Active Member.

Mechanical Engineer, McCord & Co., Chicago, III.

Res., 1352 Bryn Mawr Ave., Chicago, III.

**EANDERS, F.,** Corresponding Member.

With the Public Service Company of Northern Illinois,
Res., 336 South Ave., Wankegan, Ill.

RANG, C. E., Associate Member. Artist. 4 E. Ohio St., Chicago, Ill.

RENNERFELT, IVAR, ('orresponding Member. ('hief Eng., A.-B. Elektriska Ugnar, Stockholm, Sweden. Res., Vanadisvägen 24, Stockholm, Sweden.

RISSLER, ALBIN, Charter Member, Life Member.

Mech. Engineer, Chicago Ry. Equipment Co., Chicago, Ill.

Res., 7225 Emerald Ave., Chicago, Ill.

ROBERTSON, GUSTAF E., Active Member. With Indiana Steel Company, Gary, Ind. Res., 430 Broadway, Gary, Ind.

RODEN, G. K., CAPTAIN, Corresponding Member.
Principal, School of Navigation, Int. Corresp. School,
Scranton, Pa.

ROOS, ERIC, Active Member.

With Joseph T. Ryerson & Son, Chicago, Ill.

Res., 219 Wisconsin St., Chicago, Ill.

ROOS, GUNNAR, Corresponding Member.

Sales Engineer, Atlas Mekaniska Verkstäder, Stockholm, Sweden.

ROSINE, CONRAD, Active Member.

Designer of Special Machinery.

Res., 1818 Summerdale Ave., Chicago, Ill.

RYDSTRÖM, UNC, Cerresponding Member.
With A.B. Diesel Motorer, Stockholm, Sweden.
Res., Kungsgatan 25, Eskilstuna, Sweden.

SAFSTROM, ERLAND, Active Member.

With Western Electric Company, Hawthorne, 111.

Res., 305 Wisconsin St., Chicago, 111.

SAHLIN, JOHN, Active Member.

With Western Electric Company, Hawthorne, Ill.
Res., 910 S. Sixth Ave., Maywood, Ill.

SALKVIST, G. E., Active Member.
With H. Koppers Company, Chicago, Ill.
Res., 3544 Ellis Ave., Chicago, Ill.

SANDEGREN, ANDREW, Active Member.
Architect.
2064 Conway Bldg., Chicago, Ill.

SANDELL, H. K., Active Member.
With Mills Novelty Company, Chicago, Ill.
Res., 1646 Farragut Ave., Chicago, Ill.

SAVE, CARL, Active Member.

Arch. Designer, Western Electric ('o., Hawthorne, Ill.

Res., 3145 Edgewood Ave., Chicago, Ill.

SEABERG, FRED, Charter Member, Active Member. With H. Koppers Company, Chicago, Ill. Res., 826 Newport Ave., Chicago, Ill.

SCHÖN, ANDERS, Associate Member.

Repr. Scandia Life Insurance Company, Chicago, Ill.

Res., 4111 N. Tripp Ave., Chicago, Ill.

SCHOTT, JOHN H., Active Member. Res., 2053 Montrose Blvd., Chicago, Ill.

SELLDIN, CARL, Corresponding Member. Res., 73 Germain Ave., Quincy, Mass.

- SJÖSTRÖM, FRANK, Active Member.
  With C., M. & St. P. Ry, Co., Chicago, Ill.
  Res., 5333 N. Clark St., Chicago, Ill.
- SKJÖLD, GÖSTA, Corresponding Member. Kungl. Vattenfallsstyrelsen, Stockholm, Sweden. Res., Norrmalmsbaden, Stockholm, Sweden.
- SKOGMARK, JOHN, Corresponding Member. P. O. Box 93, Martins Ferry, Ohio.
- SKYTTE, A. BERNH., Associate Member. With Hemlandet Company, Chicago, Ill. Res., 3725 N. Marshfield Ave., Chicago, Ill.
- SODERSTAM, J. T., Active Member.
  With The Sanitary District of Chicago.
  Res., 1211 Newport Ave., Chicago, Ill.
- SONANDER, JOSEF, Corresponding Member.
  With International Harvester Corporation, 11-13 Rue
  D'Arenberg, Bruxelles, Belgium.
- SPAAK, CHAS. E., Active Member.

  Consult. Engr., Indiana Nat. Gas & Oil Co., Chicago, Ill.

  Res., 918 Wellington Ave., Chicago, Ill.
- SPONGBERG, VICTOR H., Active Member. Optician. Res., 309 W. Schiller St., Chicago, Ill.
- STERZEL, S. E., Corresponding Member.
  Res., Kaponniergatan 5, Gothenburg, Sweden.
- STJERNSTEDT, J. W., Corresponding Member. With Curtis Pheumatic Mach. Co., St. Louis, Mo. Res., 5641 Von Verson Ave., St. Louis, Mo.
- STOLPE, G. E., Corresponding Member.
  Chief Draftsman, Locomotive Dept., A. T. & S. Fe Ry. Co.,
  Topeka, Kansas.

## STRANDBERG, ERIK P., Active Member.

Building Contractor.
Res., 5027 Drexel Blvd., Chicago, Ill.

## STRANDBERG, ALGOT, Corresponding Member.

Res., Borlänge, Sweden.

## STRID, SVEN J., Charter Member, Active Member. With Central Loc. & Car Works, Chicago Heights, Ill.

Res., 11321 Curtis Ave., Chicago, Ill.

#### STROMBORG, CHAS. G., Active Member.

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#### STRUKEL, ARVID, Corresponding Member.

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## SUNDMAN, ALFRED J., Corresponding Member.

Tammerfors Linne- & Järn-manufaktur A.-B., Tammerfors, Finland.

#### SUNDSTROM, HANS, Active Member.

Chemist, Universal Portland Cement Co., Buffington, Ind. Res., 7928 Exchange Ave., Chicago, III.

#### SUNDVAHL, ERIC, Active Member.

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## SUNNERGREN, S. P., Corresponding Member.

Chief Draftsman, Denver & Rio Grande R. R. Co., Denver, Colo.

#### SVENSSON, S. M., Corresponding Member.

Res., 5468 Breedshill St., Pittsburgh, Pa.

#### SWANSON, KARL O. E., Active Member.

With B. & O. Ry. Co.

Res., 5517 Glenwood Ave., Chicago, Ill.

SYLVAN, CHR., Corresponding Member.

Editor of Industritidningen "Norden,", Stockholm, Sweden.

THORSON, LARS M., Active Member.

With Peoples Gas Light and Coke Co., Chicago, III. Res., 1543 Wells St., Chicago, III.

THULIN, JOHN, Active Member.

With Commonwealth Edison Company, Chicago, III. Res., 2016 Harrison St., Evanston, III.

TJÄDER, JOHN, Corresponding Member.

Res., Karlsviksgatan 11, Stockholm, K., Sweden.

TORNBERG, KARL, Corresponding Member.

Chemist and Mining Engineer, Oliver Iron Mining Co., Norway, Mich.

TUNELIUS, CHAS. E., Charter Member, Active Member.

Machine Manufacturer.

Res., 5432 Prairie Ave., Chicago, Ill.

UDDEN, ANTON D., Corresponding Member.

Professor, Augustana College, Rock Island, III. Res., 966–38th St., Rock Island, III.

VAHLSTRÖM, HERMAN, Corresponding Member.

With A. Borsig Locomotive Works, Berlin, Germany. Res., Kaiserin Aug. Allee 49, Berlin, Germany.

VELANDER, V. R., Active Member.

Consulting Engineer, Chicago Engineering Company. Res., 1438 Hollywood Ave., Chicago? III.

WÆSSMAN, L. G., Corresponding Member.

Res., The Oliver Club, Hibbing, Minn.

WALLIN, MARTIN, Active Member.

With Indiana Steel Company, Gary, Ind.

P. O. Box 712, Gary, Ind.

- WANDELL, IVAR, Active Member.
  With White & Christie, Architects.
  Res., 1346 La Salle Ave., Chicago, Ill.
- WAXBOM, CHAS. J. E., Corresponding Member.
  Consulting Engineer.
  Res., 151 E. Park St., Westerville, Ohio.
- WEDBERG, SVEN H., Active Member.
  With Sargent & Lundy, Engineers, Chicago, III.
  Res., 4720 Kenmore Ave., Chicago, III.
- WERN, GUST. PERS., Corresponding Member.

  Pres. Wern Mach. and Eng. Co., New York, N. Y.

  Res., 96 Hamilton Place, New York, N. Y.
- WESTBERG, CARL A., Active Member. Vice Pres., East Chicago Company, Indiana Harbor, Ind. Res., 301 W. 67th St., Chicago, Ill.
- WESTERBERG, HUGO EM., Active Member. Consulting Engineer. Res., 1613 S. Homan Ave., Chicago, Ill.
- WESTERLIND, CARL, Active Member. Architect, Chicago, III. Res., 1201 Ainsley St., Chicago, III.
- WEYDELL, F. O., Charter Member, Active Member.
  Manufacturer.
  Res., 6361 University Ave., Chicago, Ill.
- WICKLAND, ALGOT A., Active Member.

  Production Engr., Crane Company, Chicago, III.

  Res., 1932 Oakdale Ave., Chicago, III.
- WILANDER, P., Active Member.
  With Illinois Steel Company, Gary, Ind.
  Res., 556 Madison St., Gary, Ind.
- WINGREN, ARTHUR, Corresponding Member. Finnboda Slip, Stockholm, Sweden.

## WOHLBERG, J. A., Charter Member, Active Member. With Illinois Steel Company, Gary, Ind. Res., 6346 S. Wood St., Chicago, Ill.

## ZAHLEN, JOHN W., Active Member.

With the Chicago Harbor and Subway Commission. Res., 441 Belmont Ave., Chicago, Ill.

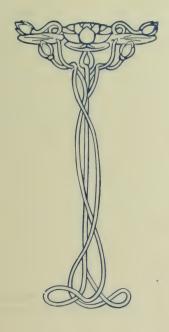


#### MEMBERS

# THE SWEDISH ENGINEER'S SOCIETY OF CHICAGO APRIL 1, 1914.

Honorary 2
Life 6
Active160
Corresponding in U. S. and Canada 58
Corresponding in Europe 30
Associate 9
Total 265

# New Members





#### O. E. J. ABRAHAMSON, Chemist,

Active Member

Norrköping Technical School, Sweden. With Universal Portland Cement Company, Buffington, Ind. Res., 508 Englewood Ave., Chicago, Ill.



#### NILS ADLER, M. E.,

Active Member

Malmö Technical School, Sweden. With Otis Elevator Company, Chicago, III. Res., 2944 Armitage Ave., Chicago, III.



#### CHARLES AHNGER, M. E.,

Active Member

Technical High School, Helsingfors, Finland. With Williams-Lloyd Machinery Co., Chicago, III. Res., 1120 Oakdale Ave., Chicago, III.



#### AXEL AKERS, M. E.,

Active Member

Mech. Eng., City Hall, Chicago, Ill. Res., 7507 Ingleside Ave., Chicago, Ill.



#### C. B. ANDERSON, M. E.,

Active Member

With Western Electric Co., Hawthorne, Ill. Res., 6147 Champlain Ave., Chicago, Ill.



#### C. O. J. BRÖMS, M. E.,

Active Member

Falu Bergsskola, Sweden.
With Inland Steel Co., Indiana Harbor, Ind.
P. O. Box 142, Indiana Harbor, Indiana.



A. CEDEROTH, M. E.,

Active Member

Technical School, Stockholm, Sweden.

City Engineer's Office, City Hall, Chicago, Ill.

Res., 3032 N. Halsted St., Chicago, Ill.



GEO. G. EHRENBORG, C. E.,

Active Member

Boras Technical School, Sweden, Civil Eng., Western Electric Co., Hawthorne, III. Res., 3128 Warren Ave., Chicago, III.



SVEN EKLUND, E. E.,

Active Member

Stockholm Technical School, Sweden. With Western Electric Co., Hawthorne, III. Res., 732 Cornelia Ave., Chicago, III.



OSCAR FOLKS, M. E.,

Active Member

Technical High School, Helsingfors, Finland. With Western Electric Co., Hawthorne, Ill. Res., 146 So. Hamlin Ave., Chicago, Ill.



E. E. HANSON, M. E.,

Active Member

Falu Bergsskola, Sweden.
With Universal Portland Cement Company,
Buffington, Ind.
Res., 6926 Union Ave., Chicago, 111.



HUGO S. HASSELQUIST, M. E.,

Active Member

Sup't, Wahl Adding Machine Co., Chicago, Ill. Res., 643 Wrightwood Ave., Chicago, Ill.



DUDLEY F. HOLTMAN, C. E.,

Active Member

Armour Institute of Technology, Chicago, Ill. With C. M. & St. P. Ry. Res., 1465 Rascher Ave., Chicago, Ill.



ARTHUR A. W. JOHNSON, M. E.,

Active Member

With L. E. Rodgers Engineering Co., Chicago. Res., 6409 So. Peoria St., Chicago, III.



BERNIE LARSON, M. E.,

Active Member

With Western Electric Co., Hawthorne, Ill. Res., 3159 Fifth Ave., Chicago, Ill.



ERIC G. LARSON, B. E.,

Active Member

Supt. of Construction, A. R. Clark & Co., Chicago. Res., 3133 Indiana Ave., Chicago, Ill.



#### OSCAR NELSON, M. E.,

Active Member

Lane Technical High School, Chicago, Ill. With Williams-Lloyd Machinery Co., Chicago. Res., 704 Aldine Ave., Chicago, Ill.



STEN V. OBERG, Chemist,

 $\it Active\ Member$ 

Norrköping Technical School, Sweden. With Western Electric Co., Hawthorne, III. Res., 759 N. 48th Ave., Chicago, III.



KARL E. OLSON, Chemist,

Active Member

Columbia University, N. Y., Chicago University, Chicago, Ill. With Goldschmidt Detinning Co., East (hicago Plant, Indiana. Res., 1105 Beacon St., East Chicago, Ind.



#### UNO RYDSTRÖM, M. E.,

Corresponding Member

Chalmers Institute of Technology, Gothenburg, Sweden. With A.-B. Diesel Motorer, Stockholm, Sweden. Res., Kungsgatan 25, Eskilstuna, Sweden.



#### ERLAND SAFSTROM, M. E.,

Active Member

Stockholm Technical School, Sweden. Technicum, Strelitz, Germany. With Western Electric Co., Hawthorne, Ill. Res., 305 Wisconsin St., Chicago, Ill.



#### FRANK SJÖSTRÖM, C. E.,

Active Member

Hernösand Technical School, Sweden. With C., M. & St. P. Ry. Co., Chicago, Ill. Res., 5333 N. Clark St., Chicago, Ill.



#### CHAS. G. STROMBORG, M. E.,

Active Member

Lewis Institute, Chicago, Ill.
With Western Electric Co., Hawthorne, Ill.
Res., 3939 Wrightwood Ave., Chicago, Ill.



#### L. G. WÆSSMAN, Chemist,

Corresponding Member

Hernösand Technical School, Sweden. With Oliver Iron Mining Co. Res., Oliver Club, Hibbing, Minn.

# Årsberättelse

af Svenska Ingeniörs-Föreningens i Chicago verksamhet under året 1913

För dem som under årets lopp intagits såsom medle<mark>mmar torde en kort</mark> Listorisk revy vara på sin plats.

Det grundläggande mötet af Svenska Ingeniörs-Föreningen i Chicago hölls på Kuntz-Remmlers lokal, Chicago, den 10 oktober 1908. Närvarande voro: Henry Nyberg, Albin P. Rissler, G. A. Åkerlind, Henry Ericsson, Fred. Seaberg, Sven Holmes, A. F. Colgren, Hjalmar Blom, Sven J. Strid, Axel Flodenberg, Eugen Nyberg, J. A. Wohlberg, Emil J. Liljeblad, B. E. Forsell, Eric Roos och Eric Sundwahl. Till ordförande valdes herr Henry Nyberg, till vice ordförande Albin P. Rissler, till sekreterare G. A. Åkerlind och till kassör Fred. Scaberg, dessa tjänstemän att uppehålla sina respektive ämbeten äfven för året 1909. Till medlemmar af styrelsen valdes Carl A. Alzén, John Brunner, Henry Ericsson, A. G. Lund och Fred. Norlin.

Den första medlemsboken utkom år 1909 med 74 medlemmar.

För året 1910 valdes herr Gustaf A. M. Liljencrantz till president och herr Albin P. Rissler återvaldes till vice president och G. A. Åkerlind till sekreterare. Till kassör valdes herr Carl W. Westerlind. Medlemsboken för det året räknar 120 medlemmar.

För året 1911 valdes Dr. Ernst J. Berg till president och herr C. G. Axell till vice president. Herr G. A. Åkerlind återvaldes till sekreterare och till kassör valdes herr Gustaf K. G. Bjurström. Katalogen för det året räknar 179 medlemmar.

För året 1912 valdes stadsingeniör John Ericson till president och arkitekten Robert C. Östergren till vice president. Till sekreterare återvaldes herr G. A. Åkerlind. Till kassör valdes herr Algot A. Wickland. Katalogen för det året räknar 209 medlemmar.

För året 1913 valdes staden Chicagos byggnadskommissarie herr Henry Ericsson till president och herr F. W. Iggberg till vice president. Till sekreterare återvaldes herr G. A. Åkerlind. Till kassör valdes herr C. A. Bolin. Katalogen för det året räknar 254 medlemmar.

För året 1914 valdes stadsingeniör John Ericson åter till president och herr C. E. Carson till vice president. Till sekreterare återvaldes herr G. A. Åkerlind och till kassör herr C. A. Bolin. Medlemsboken räknar nu 265 medlemmar.

Under årets lopp hafva vi utbytt trycksaker med Svenska Ingeniörs-Föreningen i Amerika (The American Society of Swedish Engineers), hufvudkvarter 271 Hicks St., Brooklyn, N. Y.; med tekniska skolor i Sverige, med teknologföreningen C. S. i Göteborg, men Ingeniörs-Samfundet i Borås, med Tekniska högskolan i Helsingfors och med Teknolog-Föreningen i Stockholm, som varit vänlig nog att regelbundet sända oss "Teknisk Tid skrift". Jernkontoret i Stockholm har äfven sändt oss regelbundet sina värdefulla publikationer.

Industritidningen "Norden", hvars hufvadredaktör, ingeniör Christopher Sylvan, ingick såsom medlem i vår förening under sina arbetsår här i landet, har äfven varit frikostig nog att regelbundet sända oss sin publikation. Flera svensk-amerikanska tidningar och amerikanska tidskrifter ha donerat sina publikationer till föreningen, såsom närmare redogöres för i biblioteks kommitténs rapport.

Under årets lopp besöktes föreningens kontor, 619-620 City Hall Square Building, af 2,130 personer, enligt registreringsboken.

Det för föreningen viktigaste arbetet utfördt under årets lopp torde vara utarbetandet af nya stadgar. De nya stadgarna antogos på novembermötet med 76 röster mot 27. Kommittén som utförde revisionsarbetet med stadgarna utgjordes af: Robert C. Östergren, John Brunner, Klas O. Olson, C. F. Anderson, F. Seaberg och G. A. Åkerlind.

#### KASSÖRENS RAPPORT FÖR ÅR 1913.

To the Swedish Engineers Society of Chicago.

Gentlemen:—The following shows the receipts and disbursements of money and the financial standing of the Society for the year ending Dec. 31st, 1913.

#### Receipts:

Cash balance from year 1912
Money received during the year 1913
And the second s
Total\$2,634.44

#### Disbursements:

Expenses for the year 1913\$1,112.09
Assets on hand, Dec. 31, 1913, as follows:
Commonwealth Edison, Bond No. 18095
"Permanent Fund" in savings bank 50.00
Cash on hand

Total.....\$2,634.44

Following is an itemized account of money received and expended during 1913.

#### Itemized Receipts

Dues from Active members\$	822.25
" Life members	100.00
" " Corresponding members	105.02
" Associates	22.00
Interest on Commonwealth Edison bond	50,00
Ads in Membership Book	40.06
Photo Engravings for Membership Book	21.75
Keys for the Society's office	
Donations	8.75
Miscellaneous	21.77

Total.....\$1,244.54

#### Itemized Expenses

Office rent in City Hall Building\$	375.00
Electric light	6.23
Telephone	23.95
Purchase of 100 keys for the office	10.00
Library, Subscriptions and Book cases	27.75
Hall rent and Entertainments, including deficits at the annual	
meeting 1913 and annual dance in March (1913)	92.38
	26.59
By-law Committee: Typewriting and printing of new Constitution	
Printing of Membership books and Year books	283,00
Photo Engravings for Membership book and Year book	68.25
Commission for soliciting ads in Membership book	7.50
Rejected membership dues returned	2.00
Collection charges, State Bank of Chicago	.45
Appropriation for "Trasdockan" No. 3	25.00
Secretary's expenses for the year:	
Notices of meetings\$ 43.60	
Postage stamps 58.88	
Stationery and Office supplies	
Typewriting 5.80	
Miscellaneous	
	11111
Transported authorized for the real	144.44
Treasurer's expenses for the year:	
Postage stamps	
Stationery and miscellaneous 5.75	
	19.55
Total\$	1,112.09
Assets	
Commonwealth Edison Bond\$	035.00
Permanent Fund in Savings bank	50.00
Cash on hand.	
Cash on hand	401.00
Balance Dec. 31, 1913	522 35
	*
Balance Dec. 31, 1912, was	1,589.90
Profit for year 1913	132.45
Outstanding dues, Dec. 31, 1913.	150.75
Outstanding days, 1900, 61, 1910	100.10
TO 10 27 2 11 2	

Respectfully submitted,

C. A. BOLIN, Treasurer.

At the December meeting the President, Mr. Henry Ericsson, appointed the following members to constitute an Auditing Committee and to go through the Treasurer's books. Melcher J. Eichhorn, Albin F. Rissler and F. P. Fogel. Mr. Eichhorn as chairman gave the following report at the annual meeting of the Society, Jan. 24th, 1914:

"The undersigned having been appointed a committee to audit the Treasurer's books for the year 1913, find them to be correct and the Society's finances stand as follows:

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Cash balance on hand Jan 1st, 1913	\$1,389.96
Total receipts during 1913	1,244.51
	\$2,634,44
Expenditures	
Total expenditures during 1913	\$1,112.09
Balance on hand Dec. 31, 1913	1,522.35
The balance on hand consists of	\$2,634.44
One Commonwealth Edison Bond No. 18095	\$1,035.00
Cash in two banks and in the Treasurer's hand	* /
	\$1,522.35

Estimate of outstanding dues

#### Respectfully submitted,

M. J. EICHHORN,

A. P. RISSLER.

F. P. FOGEL.

#### REPORT OF THE LECTURE COMMITTEE.

(A. M. Levin, C. G. Axell, K. G. A. Bjurstrom, Carl Säve.)

Most of the work to provide for lecturers at the regular meetings have fallen on Mr. C. G. Axell, and the synopsis of meetings will show that he has succeeded very well. Mr. Axell has even been able to arrange for the use of a stereopticon without charge to the Society, which has materially added to the interest of the lectures. It has for years been the desire to buy an instrument for the Society for the purpose, but so far we have not succeeded.

## REPORT OF THE LIBRARY COMMITTEE. (Melcher Eichhorn, John Zahlen.)

Bibliotekskommittén har under det förflutna året ökat vår boksamling genom att subskribera å några af de förnämsta tekniska tidskrifterna, publicerade här i landet, nämligen "Engineering News", "Power", "American Machinist", "Electrical World", "National Engineer".

Kommittén får också härmed taga tillfället i akt att uttrycka sin och Föreningens tacksamhet för de donationer, som från medlemmar och många andra håll kommit oss till del, bland annat "Engineering Record", "Teknisk Tidskrift", "Norden", "Jernkontorets Annaler", "Export-Tidnin gen", "National Geographical Magazine" samt svensk-amerikanska tidningar m. m., som omnämnts i detalj i sista årsberättelsen.

Särskildt måste nämnas det värdefulla och omfattande verket "History of the Swedes in Illinois", som donerats af vår hedersledamot hr Gustaf A. M. Liljencrantz.

Biblioteket kommer att under år 1914 skötas af herrar Östergren, J. G. Moohl och Klas O. Olson.

#### REPORT OF THE HOUSE COMMITTEE.

(Charles Engwall, Walter H. Eriesson, Carl Bergquist, Georg Nannfeldt.)
This committee started its activities with the regular meeting af the Society February the 22nd, 1913, at "Tavern." 34 members and their friends present.

In place of the regular meeting of the Society the annual reception and ball or "ladies night" was given, March 15th, at Svenska Klubben.

April the 19th, the regular meeting was held at Svenska Klubben. 47 persons were present.

May 17th, the regular meeting was held at the Svithiod Singing Club. 56 members and their friends present.

June 22nd, the Society had a midsummer festival at Riverside Park. About 100 members and their friends present.

During the month of July there was no meeting.

The 10th of August the president Mr. Henry Eriesson and Mrs. Eriesson had invited the members and their ladies to visit their summer home at Pistakee Lake. About 50 members and their ladies took advantage of the invitation and had a most enjoyable time.

The 20th of September a family "kräftsexa" was arranged for at the Svithiod Singing Club. About 65 ladies and gentlemen took part.

The 27th of September the members and their friends had the good fortune to visit the great steel plant at Gary, Indiana, the trip being arranged for by our fellow member Mr. John Brunner. About 150 members and their friends taking part in the trip.

The 18th of Oktober the regular meeting was held at Svenska Klubben. 82 members and their friends present.

November 15th the regular meeting was held at Svithiod Singing Club. 78 members and their friends present.

December the 20th the regular meeting was held at Svenska Klubben. 39 members and their friends present.

January the the 14th the annual meeting was held at Svenska Klubben. About 80 members and their friends present.

The expenses and revenues for this period, as far as the house committee is concerned, has been as follows:

as contoured, new sould as rono with	
February meeting	3.10
March meeting ("Ladies' night")	31.48
April meeting—No expenses.	
May meeting	1.00
June meeting	
July, August and September—No expenses.	
October meeting	4.00
	6.00
December meeting	5.00

\$20.00

This shows the total of expenditures by the House committee during the year to be \$35.58, and if not for the poor financial result of the Ladies night in March, we would have come out about even, which we think is gratifying considering that the House committee pays five dollars hall rent for each meeting and the supper for the lecturer.

As chairman of the House committee, I desire to thank my fellow committee men, Messrs. Walter H. Ericsson, Carl Bergquist and Georg Nannfeldt for their assistance, and the membership at large for their kindness to me personally and for their generosity.

#### CHARLES ENGWALL,

Chairman, House Committee.

#### MEETINGS HELD DURING THE YEAR 1913.

February the 22nd, at "Tavern." Mr. G. A. Åkerlind read a paper on "The Modern Manufacture of Steel Its Inspection and Tests." The lecture was illustrated by a number of specimens showing various defects in steel tested and the characteristics of different grades, etc. Thirty-four men attended.

March the 15th, "Ladies' night" took the place of the regular meeting. April the 19th, meeting at Svenska Klubben. Mr. C. E. Hotchkiss of the Peoples Gas, Light and Coke Company gave an interesting talk on "Industrial Gases." The lecture was illustrated by stereopticon slides. Mr. Lundgren af Gothenburg talked about the proposed new steam ship line from Sweden to the United States.

May 17th, meeting at Svithiod Singing Club. A paper on "Progress and Engineering" was read by our fellow member Theodor A. Bergen. At the "sexa" Lieutnant Richard Smedberg of Stockholm, Sweden, special investigator for the Swedish Waterfalls Commission, spoke of his observations and impressions. 56 men attended the meeting.

June 22nd, a midsummer pie-nic was arranged for at Riverside Grove in Evanston, Ill. About 100 persons taking part.

July. No meeting.

August the 10th. The President of the Society Mr. Henry Ericsson had invited the members and their ladies to visit his summer home at Pistakee Lake, about 50 miles northwest from Chicago, on the C., M. & St. P. R. R. About 50 persons took advantage of the invitation and enjoyed greatly the hospitality of Mr. and Mrs. Ericsson and their interesting family.

September the 27th, an excursion to Gary, Indiana, to visit the world reknown plant of Indiana Steel Company had been arranged for by our fellow member Mr. John Brunner, who through his influence had succeeded to secure this unusual favor. After arriving at Gary the party was taken by special train to the several points of interest, like the coke ovens, the blast furnaces, the open hearth furnaces, the rail mills, the power house, the axle shops, the ore docks with their immense unloading machinery, etc.

The visit was a memorable one for those attending. About 150 men in the party.

October 18th, regular meeting at Svenska Klubben, Mr. F. W. Iggberg gave a lecture on "The Operation of a Modern Telephone Exchange" illustrated by stereopticon views, actual samples and diagrams. (See page 69.) October 10, 1908, the constitutional meeting of the Swedish Engineers' Society of Chicago was held at Kuntz-Remmler Restaurant, on Wabash Ave., Chicago. This event was particularly remembered at the "sexa" following the business meeting. The Secretary gave a brief outline of events that lead to the establishment of the new Society, and mentioned ome of the men active in the work in those days. The following gentlemen attending that first "regular" meeting of the S. E. S. of C. the 10th of October, 1908, were present at this meeting the 18 of October, 1913: Henry Ericsson, Albin P. Rissler, A. F. Colgren, Fred Seaberg, Emil J. Liljeblad, B. E. Forsell and G. A. Åkerlind. Others of the early active workers present were John E. Ericsson, G. A. Bjurstrom and Hjalmar Lundquist. Dr. A. J. Carlson of Chicago University, the first honorary member of the Society (1910), spoke of his trip to Europe during the summer and his meeting with such celebrities in the scientific world as Professor Arrhenius and others. The pleasure of the evening was greatly enhanced by quartette song of Mr. Thure Johanson, F. Seaberg, C. F. Anderson, Lönnerblad and C. M. Hedman. The meeting ended with the singing of "Du gamla, du fria" with Mr. Lönnerblad rendering the solo. About 75 men took part in the meeting.

November 15th, meeting at the Svithiod Singing Club. The new constitution was voted upon. 76 affirmative votes and 27 negative were cast. Mr. V. R. Velander gave a lecture on "Mechanical Stokers for Steam Boilers," illustrated by stereopticon slides. In this case, as in a number of previous cases, the stereopticon was furnished and operated by Mr. C. G. Axell. As usual "sexa" was enjoyed after the meeting. About 75 men present.

December 20th, meeting at Svenska Klubben. This meeting was devoted to the election of officers and members of the Board of Directors. For President, Mr. John Ericson; for Vice-President, Mr. C. E. Carson; for Secretary, Mr. G. A. Åkerlind, and for Treasurer, Mr. C. A. Bolin, were elected. For members of the Board of Directors Messrs. Henry Ericsson, Carl Säve and E. E. Hall, to succeed Messrs. Dr. Ernst J. Berg, John E. Ericsson and Klas Olson, were elected. The following members were elected on the nominating committee for 1914: C. G. Axell, Carl Bergquist and F. W. Iggberg. There was no lecture for the evening. About 40 men present.



#### Dödsfall





Ingeniören ERIC SVENSSON afled den 10 Juni 1913 i Göteborg, Sverige. Detta enligt en kort notis i Chicagotidningen "Svenska Amerikanaren" för den 10 Juli 1913, och som vi nödgas antaga vara korrekt, enär våra bemödanden att från hans hem i Jämtland erhålla vidare upplysningar varit fruktlösa. Ingeniör Svensson hade för en längre tid varit sjuklig och beslöt på våren att återvända

till sitt gamla hem i Hammerdal, Jämtland. Han nådde dock icke hemmet men fick åtminstone dö på svensk jord.

Enligt de strödda uppgifter sekreteraren lyckats samla, föddes Eric Svensson den 13 Augusti 1866 i Sverige; genomgick Tekniska Högskolan i Stockholm 1892 och reste samma år till Förenta Staterna och världsutställningen i Chicago. Sedermera var ingeniör Svensson bosatt i Duluth, Minnesota, var för ett antal år konstruktör vid American Bridge Company, etablerade sig såsom konsulterande ingeniör i en större stad "vesterut" (Salt Lake City, Utah, förmodligen), återkom till Chicago och efter "civil service examination" erhöll han anställning såsom konstruktör på brobyggnadsafdelningen, Department of Public Works i City Hall.

Redan på vintern 1913 planerade ingeniör Svensson att resa hem till Hammerdal, fädernegården i Jämtland, där en syster ännu lefver, men hann ej längre än till Göteborg, då han kallades hädan. Framstående konstruktör, ihärdig arbetare, godmodig och hjälpsam var han omtyckt af öfverordnade och kamrater. I Svenska Ingeniörsföreningen i Chicago ingick ingeniör Svensson såsom korresponderande medlem 1913, uppgifvande sin adress Hammerdal, Jämtland, Sverige, det gamla hemmet, som dock icke förunnades honom att återse. Frid öfver hans minne!



CHARLES G. STOLPE, traveling mechanical engineer with the Bettendorf Axle Company, died in New York City the 16th of April 1913. Mr. Stolpe was born in Madison, Greenwood County, Kansas, the 16th of March, 1879, of Swedish parents, his father arriving to the United States in 1877 and his mother Carolina Tellin in 1870, both from Lesjöfors, Värmland, Sweden. Young Stolpe spent his school years in

Topeka, Kansas, where his father held a position as chief draftsman in the locomotive department of the Atchison, Topeka & Santa Fe Railroad. At the age of fourteen he entered the shops of that road as machinist apprentice and served part of the time in the drawing office and in the testing department. After having completed his term he studied mechanical engineering for two years at Kansas University, Lawrence, Kansas.

In 1902 Mr. Stolpe accepted a position as designer with the Mexican Central Railroad with offices in Mexico City. Two years later he had advanced to be chief draftsman and in 1905 he became mechanical engineer on the National & Tehauntepec Railroad with headquarters at Rincon Antonia, State of Oaxaca, Mexico. Here he met Mr. William G. Ransom, mechanical engineer for the Westinghouse Air Brake Co., and as his assistant went with him to the Guaqui La Pas Railway of Bolivia, South America, to introduce the Westinghouse automatic air brake on that railroad. After half a year a similar expedition was made to Peru, where the Westinghouse air brake was introduced on the Peruvian Southern Railway and the Peruvian Central Railway.

In 1907 Mr. Stolpe returned to the United States and lived with his parents, then residing in Chicago, Ill., until 1908, when he secured a possition as traveling mechanical engineer with the Bettendorf Axle Company, Bettendorf, Iowa, where the new large plant for building steel railroad cars is located. In February 1913, he was promoted to take charge of the Company's office in New York City. During a trip South, Mr. Stolpe took sick and had to return to his home in New York, where he passed away shortly after his return of heart failure.

Mr. Stolpe was an unusually gifted young man: bright, upright, loveable, and the sencere friendship he enjoyed by all who knew him was a natural outcome of those qualities.

His parents, three brothers and one sister mourns his loss, as do his numerous friends.

In 1908 Mr. Charles Stolpe became a member in the Swedish Engineers Society of Chicago, and our sorrow at his being taken away from us so early in life is mingled with pride over his success in life, the high regard he won and the sterling qualities he exhibited as a Swedish-American. Honor to his memory!



OLOF FERDINAND NELSON, direktör och vice president i klichéfirman Osgood Company i Chicago, afled i sitt hem i Chicago den 29 Januari 1913.

Olof Nelson föddes den 22 April 1867 i Halmstad, Sverige, och anlände vid fjorton års ålder till Förenta Staterna, dit föräldrarna emigrerade och bosatte sig i Chigago. Vid tjugotreårs ålder antog Nelson förmansplatsen hos den firma, af

hvilken han senare blef medlem och vice president.

Under sitt förmanskap lyckades Nelson göra en högst värdefull uppfinning, den så kallade "Nickeltype-processen", hvilken nu användes öfverallt i Amerika och äfven i många europeiska länder. De ekonomiska fördelarne häraf satte Nelson i stånd att, som han önskade, inlägga sin kraft och energi särskildt i arbetet för höjandet af svensk sång i Förenta Staterna, men för öfrigt i alla patriotiska företag i Chicago, där målet var höjandet af svenskarnes anseende och befordrandet af deras intressen.

År 1910 var Nelson arrangör för Svensk-Amerikanska Elitkörens sångarturné till Sverige, och då kören uppvaktade Sveriges konung dekorerade denne Nelson med Vasaorden, en utmärkelse som han högt uppskattade och som i ej ringa grad bidrog att göra denna "broslagning" från Förenta Staterna till det gamla fäderneslandet så minnesrik.

Nelson var i ordets bästa mening "a self-made man", utrustad med en stark kropp, klart förstånd, en okuflig energi, stor arbetsförmåga och en kärlek för sång och den svenska äran, som dominerade alla hans sträfvanden. Vid en resa till Minneapolis och Duluth på eftersommaren 1912 ådrog sig Nelson en svår förkylning, som, trots hans starka konstitution, den skickligaste läkarevård och den ömmaste omvårdnad, dock slutade med döden efter långa månaders tålmodigt lidande.

Olof Nelson gifte sig den 3 Februari 1894 med fröken Anna Christina Rasmussen, som nu jämte dottern Ethel sörja den alltför tidigt bortgångne maken och fadern.

år 1911 ingick Olof Nelson såsom medlem i Svenska Ingeniörsföreningen i Chicago, och beklaga vi djupt förlusten af denne vår högt värderade medlem. Det är män af Olof Nelsons typ: kraftiga, förståndiga, uppoffrande, som vi svenskar i Amerika så ytterst väl behöfva. Länge skall hans minne bevaras i tacksam hågkomst.





at the Swedish Club at their Sixth Annual Meeting,
January 24, 1914.

For names present see page 48.

### **ARSMÖTET**

# den 24 Januari 1914 på Svenska Klubben, 1258 N. La Salle St. Chicago

Mötet öppnades i den stora salen kl. 8:30 c. m. af herr Henry Ericsson, föreningens president. Ordförande för de olika kommittéerna afgåfvo sina rapporter, såsom redogöres för på annat ställe i denna årsberättelse. Presidenten kungjorde därpå, att det var hans angenäma plikt att som sin sista officiella handling såsom president för Svenska Ingeniörs-Föreningen i Chicago, å ett antal medlemmars vägnar såsom bevis på deras aktning och erkänsla till ingeniör Albin P. Rissler öfverlämna åt honom ett lifstids medlemskap i Svenska Ingeniörs-Föreningen i Chicago. För tjugufem år sedan, sade presidenten, fanns på nordsidan en svensk gymnastikförening, hvari han och andra här närvarande voro medlemmar och ingeniör Risslar var "kapten". Vi blefvo äldre och skingrade, såsom ju var att vänta, och att hoppa öfver trähästen var ej längre så tilldragande; men den svenska energien och det svenska sinnet kräfde utlopp, och närhelst de svenska ingeniörerna försökte åstadkomma någonting i föreningsväg var man alltid säker på att finna Rissler där. Så vid perioden för världsutställningen i Chicago och så vid bildandet af the Scandinavian Technical Society 1902 samt vid bildandet af denna förening för sex år sedan. En tidrymd af tjugufem år ligger bakom oss och vi, som ej längre räknas till de unga och något litet hafva en förnimmelse af hvad ett kvarts sekel innebär, önska att på detta sätt offentligen betyga ingeniör Rissler vår erkänsla för troget och oegennyttigt arbete, för hans redbara karaktär och fasta vänskap.

Ingeniör Rissler tackade för den oväntade öfverraskningen. Om han under de gångna åren lyckats uträtta något för sina kamrater, de svenska ingeniörerna, så vore medvetandet därom belöning nog; men denna afton och denna gåfva, jämte de vänliga orden af hans gamle vän Henry Ericsson såsom representant för de öfriga vännerna, skulle alltid för honom utgöra ett af hans lyckligaste minnen.

Efter att hafva tackat tjänstemännen, styrelsen och de olika kommit téerna för deras arbete under året, öfverlämnade därpå den afgående presidenten ordförandeklubban till den nyvalde presidenten, stadsingeniör John Ericson. Hr Ericson uppläste därpå följande tal:
Mina herrar!

För två år sedan, då jag-hade äran tala till Eder som den då nyvalde presidenten af Svenska Ingeniörs-föreningen i Chicago, gjorde jag det med lätt hjärta och sinne. Allting var då ljust och glædt och alla tillfrædsställda med de framsteg föreningen gjort och den ljusa framtid som syntes ligga framför oss.

Efter att ha tjänat ett år, nedlade jag presidentvärdigheten under förhoppning att ej åter nödgas påtaga mig ansvaret af en sådan syssla.

Ställningen för närvarande synes dock vara sådan, att jag, mot min vilja, ansåg det rådligt att för föreningens välfärd mottaga kallelsen att för detta år tjänstgöra såsom föreningens president.

Denna gång, jag måste medgifva det, är det ej med lika så lätt hjärta och sinne jag talar till Er, mina herrar.

Det kan ej längre döljas, att en viss agitation ligt rum inom föreningen att ändra dess karaktär och verksamhet för framtiden, att följa förebilden af Brooklyn-föreningen. Detta har förut försökts i Chicago, Philadelphia, Pittsburgh och andra platser med mer eller mindre olycksdigra följder.

Den önskan af medlemmar, att i en snar framtid erhålla bättre kvarter än föreningen nu har, anser jag vara i sin ordning, men för att uppnå detta resultat, måste föreningens verksamhet skötas på samma konservativa sätt som bragt den upp till hvad den nu är.

Som I veten, mina herrar, har jag tillbragt mera än trettio år af mitt lif i Chicago. Under denna långa tidsföljd har jag tagit liflig del i mina landsmäns sträfvanden, särskildt de Svenska Ingeniörernas. Jag har sett företag uppblomstra endast för att om några år försvinna.

Då denna förening grundades, år 1908, måste jag erkänna att jag, i likhet med många andra, ej trodde att detta företag skulle röna bättre framgång än föregående försök att i Chicago uppehålla en Svensk Ingeniörsförening. Till min och många andras öfverraskning gick dock den nya föreningen framåt med stora steg, och år 1911 ansåg jag att det ej var rätt att stå utanför, och jag ingick därför såsom medlem.

Hvad var orsaken till denna oväntade framgång af den nya föreningen? Då jag var ung, hade jag i likhet med de flesta andra den föreställningen, att endast graduerade män borde tillhöra en Ingeniörs-förening. Nu iåkar det vara så, att i detta land mindre vikt fästes vid skolbetyg än vid förmågan af vederbörande att utföra det arbete som önskas, och på det sättet har det händt att mannen utan examen har gått framom den som ansåg sig mera berättigad att kallas Ingeniör.

Den nya föreningen insåg detta förhållande och tillgodogjorde sig de fördelar, som därmed erbjöds, och detta är en af orsakerna till den närvarande stora och respektabla tillslutningen.

Ett annat viktigt skäl för föreningens starka tillväxt var tillämpandet af den principen, att medlemsafgifter, erlagda af alla, också skulle användas till förmån för alla, till affärer tillhörande en Ingeniörs-förening, och det förtroende följandet af en sådan princip ingaf.

Det är denna sanna demokrati och det rationella användandet af föreningens penningar, tillsammans med ihärdigt arbete af tjänstemännen, som gjort denna förening till hvad den är i dag.

Nu några ord med afseende på en önskan af vissa medlemmar att utsträcka denna förenings sociala verksamhet.

Jag kan skryta med att jag för två terminer var president för The Swedish Glee Club, nu Svenska Klubben. Mina erfarenheter där säga mig, att det skulle vara i högsta grad ovist af Svenska Ingeniörs-föreningen i Chicago att söka etablera en liknande inrättning.

När en person förenar sig med en social eller nöjesklubb, så vet han att det väntas af honom, att han skall taga del i klubbens tillställningar och dela omkostnaderna. En person som man vet har olika åsikter med dem inom en sådan klubb, ombedes icke att ingå som medlem. Det är ett karaktärsdrag hos svensken, att han i de allra flesta fall icke vill lägga ut penningar för ett sådant ändamål, där några få draga fördelen på bekostnad af de öfriga. Om vi skulle äfventyra försöket att förvandla denna förening till en social klubb, så är jag öfvertygad om att den konservativa delen, kärnan af denna förening, skulle hastigt försvinna.

Jag vill ej motsätta mig en ökning i denna förenings nöjesprogram, men jag ogillar bestämdt att penningar, tillhörande föreningen, skall användas för ett sådant ändamål.

Det bör vara denna förenings syfte, att göra våra möten instruktiva, kamratliga och uppmuntrande, men det bör alltid ihågkommas, att vi äga medlemmar med vidt skilda lifsåskådningar, och det är till vårt gemensamma intresse att taga hänsyn härtill och undvika öfverdrifter, som kunna såra.

För en jämförelsevis ny förening utan tyngande rikedomar anser jag för min del att våra möten äro så nära ideala, som gärna kunde väntas. De som önska "a drink" betala för den, de som endast dricka vatten behöfva ej begära ursäkt därför. Talen, historierna, våra sånger "from the old country", göra att vi för ögonblicket åtminstone glömma att vi äro främlingar i ett främmande land.

Men hur är det med "hemmet", som var en af argumenten i förra årets agitation? Ett "hem" för de unga svenska ingeniörer, som komma till Chicago. Mina unge vänner, ni kommo icke till Chicago för att mottagas i ett "hem", tillhörigt denna förening eller någon annan förening. Ni kommo hit för att finna arbete och bryta er egen bana, och kommen ihåg, mina unge vänner, att framgång beror på er själfva och icke på någon annan. Vi vilja göra hvad vi kunna för att bistå er och uppmuntra er i edra sträfvanden, men som sagdt: framgång beror på er själfva och icke på någon annan.

Då jag kom hit till landet, bekymrade sig icke någon för min bekvämlighet. Jag hade icke någon ingeniörsförening att gå till, icke ens en bekant eller en vän att uppmuntra mig, och allvarsamma svårigheter nödgades jag genomgå, men jag har ej skäl att beklaga dessa erfarenheter, som synas vara nödvändiga för utvecklingen af vår karaktär.

För min egen del har jag tyckt om sällskap och, ehuru mera begränsadt, gör jag så ännu. Här i Chicago hafva vi tvänne väl etablerade och vä! skötta Svenska Klubbar, till hvilka vi äro välkomna, om någon af oss önskar mera af sällskapslifvet än vår förening ger.

Efter hvad jag här sagt, torde det vara tydligt för er, mina herrar, att jag fullt och fast tror på de principer, som utgjort rättesnöret för denna förenings ledning under de gångna åren af dess tillvaro, och att det stora flertalets intressen hellre böra tillgodoses än hugskotten af de få.

Jag har här i allmänna drag sökt framlägga det program jag ämnar följa i årets arbeten, och jag uppmanar er, mina herrar, medlemmar i Svenska Ingeniörs-föreningen i Chicago, och dess vänner, att bistå oss i våra sträfvanden att göra denna förening mera grundfast, mera nyttig och mera respekterad.

Därpå följde utnämningarna till de olika kommittéerna.

Lecture Committee: Albin P. Rissler (chairman), V. R. Velander, Victor Nicholson.

Library Committee: Robert C. Ostergren (chairman), J. G. Moohl, Klas O. Olson.

House Committee: Fred Seaberg (chairman), C. M. Hedman, Clarence S. Ongman.

En särskild kommitté utnämndes för att samarbeta med den kommitté, som Svenska Ingeniörs-Föreningen i Amerika tillsatt för att vidtaga lämpliga anordningar för den af Teknolog-Föreningen i Stockholm föreslagna Svenska och Svensk-Amerikanska kongressen, att hållas i För. Staterna under tiden för Panama-expositionens hållande i San Francisco sommaren 1915.

För att befordra och sprida intresset för denna kongress sammansattes kommittén af en representant från hvarje teknisk skola i Sverige, Finland och Förenta Staterna, där en sådan representant förefanns inom föreningen. Ett undantag gjordes för Tekniska högskolan i Stockholm, enär den mest lämpliga mannen för ordförande, ingeniör John Brunner, och den mest lämpliga sekreteraren, ingeniör C. G. Axell, råkade båda vara från denna skola. John Brunner (ordförande) och C. G. Axell (sekreterare), Tekniska högskolan i Stockholm; Tore M. R. Adler, Stockholms Tekniska skola; Alfons Ahnger, Helsingfors Tekniska skola; Martin Balcher, Malmö Tekniska skola; K. G. A. Bjurström, örebro Tekniska skola; Helmer Dedering, Hernösands Tekniska skola John E. Ericsson, byggmästare; C. J. Erickson, Nebraska University; G. E. Gustafson, Massachusetts Institute of Technology; Carl V. Johnson, Norrköpings Tekniska skola; Malte Malling, Borås Tekniska skola; Martin Norell, Filipstads bergsskola; John A. Nyden, University of Illinois; Klas O. Olson, Falu bergsskola; Robert E. Östergren, Armour Institute of Technology, Chicago; C. S. Peterson, President för Svenska Klubben i Chicago; Albin P. Rissler, Chalmers Tekniska skola, Göteborg.

Vid ett senare styrelsemöte invaldes F. W. Iggberg och Carl Bergquist att besätta de två lediga platserna efter H. R. Adler, som resignerat, och C. V. Johnson, som återvändt till Sverige.

Sedan affärsdelen af mötet var öfverstökad, troppade de närvarande af till matsalen, där en festlig "sexa" var dukad. Sedan den värsta rusningen var öfver, äskade presidenten, stadsingeniör John Ericson, ordet. Vi hade i afton det stora nöjet att såsom hedersgäst äga den nyligen af svenska regeringen utnämnde konsuln i Chicago harr G. Puke, och å Svenska Ingeniörs-Föreningens i Chicago vägnar vore det hans förmån att önska konsul Puke hjärtligt välkommen, och vore det hans fasta öfvertygelse att denna vår första bekantskap skulle leda till ett samförstånd, som i någon mån torde underlätta herr konsulns arbete i Chicago och i alla händelser göra hans vistelse här litet mera angenäm. Konsul Puke svarade i ett längre anförande. Han tackade för inbjudningen, för de vänliga orden af presidenten och för det hjärtliga mottagandet af Svenska Ingeniörs-Föreningen i Chicago. Det vore nu hans funktion, såsom svensk konsul, att söka utgöra "the missing link" eller, med andra ord, föreningslänken mellan svenskarne i Chicago och svenskarna i Sverige, vårt gemensamma fosterland, churu vi må vara medborgare af det ena eller <mark>undersåtar af</mark> det andra, och hans första plikt vore nu att från landsmännen i "gamla landet'' framföra en hjärtlig hälsning till landsmännen i Chicago. Världen krymper alltmer ihop. Ingen framåtsträfvande nation kan längre begränsa sin verksamhet inom egna landamären, och särskildt synes det ingå i Försynens plan att svensken måste ut i världen. Så har det varit under gångna årtusenden och så blir det väl för framtiden. Särskildt har ju svensken i senare tidehvarf inlagt sin kraft, sin kultur, sitt blod i uppbyggandet af denna stora republik, och det vore väl den naturligaste sak i världen att vi svenskar, om vi lefva och bo på den ena eller andra sidan

af jordklotet, dock borde söka tillgodose vara gemensamma intressen i såväl materiellt som andligt afseende och efter bästa förmaga skulle han sträfva till detta mål.

Ett fyrfaldigt hurra för Sverige och sjungandet af "Du gamla, du fria" hälsade konsul Pukes patriotiska tal.

Den återvalde kassören, ingeniör C. A. Bolin, tackade för det honom visade förtroendet och omnämnde, att medlemmarna öfverhufvudtaget fullgjort sina ekonomiska skyldigheter till föreningen, men han nödgades medgifva att det kunde varit bättre, och var det hans allvarliga begäran att alla medlemmar ville vara vänliga nog att utan mångfaldigt upprepade påminnelser insända sina årsfgifter tidigt och därigenom högst väsentligt underlätta kassörens arbete och spara frimärken och brefpapper. Föreningens stadgar voro ju klara nog i detta fall, och var det hans öfvertygelse att storleken af afgiften— två dollars om året för korresponderande medlemmar och sex dollars för aktiva — i de flesta fall icke vore mera betungande för vederbörande att erlägga vid årets början än vid dess slut.

Tal höllos äfven af representanter för den svensk-amerikanska tidningspressen, "Svenska Amerikanaren", "Svenska Tribunen-Nyheter" och "Svenska Kuriren", omväxlande med sång af "menige man" enligt formulär i ett för tillfället utgifvet nummer af "Trasdockan".

En kvartett, bestående af inom Chicagos svenska sångarvärld ryktbara män, förhöjde väsentligen feststämningen. Herr Anthony, Cherrström, Dahlén och Lönnerblad voro vänliga nog att låta oss höra några af våra gamla till hjärtat gående fosterländska sånger.

Den afgående presidenten, byggnadskommissionär Henry Ericsson, hade frikostigt nog arrangerat med en "teaterfröken" att roa sällskapet med "the latest songs" och en "teaterherre", som personifierade "characters" af olika nationaliteter samt berättade roliga historier, alltsammans lifligt senteradt af alla.

Närvarande vid årsmötet den 24 Januari 1914:

John Ericson, Henry Ericsson, John E. Ericsson, konsul G. Puke, Albin P. Rissler, Klas O. Olson, C. G. Axell, C. A. Bolin, E. J. Liljeblad, Axel Karlsteen, S. Oberg, Chas. G. Stromborg, N. Adler, U. Rydström, C. M. Hedman, M. J. Eichhorn, A. Akers, C. O. J.Bröms, F. Seaberg, S. G. Göransson, A. Cederoth, H. Westerberg, C. F. Anderson, O. Folks, C. J. Erickson, Helmer Dedering, Andrew Sandegren, A. A. V. Johnson, Victor Nicholson, V. H. Spongberg, C. E. Schmitterlow, H. Sundström, G. G. Ehrenborg, Alfons Ahnger, Guy C. Pitts, C. E. Carson, S. Eklund, Fred Norlin, Stephan Creutz Jr., V. R. Velander, C. E. Olson, F. W. Iggberg, A. Nordquist, Carl Säve, C. A. Mayer, Thure Johanson, Emil Erickson, Axel Braunders, Charles Ahnger, E. E. Hanson, G. E. Gustafson, R. W. Fogel, Carl Westerlind, C. Ehnborn, Arthur Bolin, E. P. Johnson, K. G. Lindwall, Cromelli, Clarence S. Ongman, A. F. Larson, Sven Axel, V. Hult, Dr. Iverson, Axel G. Asproth, Eric Hall, C. E. Hultquist, R. C. Östergren, H. H. Benson, John J. Erickson. Wm. Rydner, L. G. Wassman, A. A. Wickland, J W. Henrikson, Charles Engwall, A. Kaptuller, Carl Bergquist, O. Nelson, Georg Nannfeldt, Ivar Thomée, Frithiof Malmquist, Th. Sjöquist, G. A. Åkerlind.

#### ERKÄNNANDE.

Under det gångna året har ingeniör C. G. Axell, under sekreterarens långa frånvaro, skött de löpande göromålen i Chicago såsom sekreterare pro tem., och å egna och föreningens vägnar ber jag få framföra såväl min som allas vår tacksamhet till ingeniör Axell för hans ihärdiga effektiva arbete till föreningens fromma.

G. A. ÅKERLIND.



## **Progress and Engineering**

A Paper Read Before The Swedish Engineers' Society of Chicago,

May 17, 1913, by

#### THEODORE A. BERGEN.

About ten years ago Professor Perry, of the University of Oxford, delivered a remarkable lecture, contrasting the education given in our days to the youths of the ruling classes with the education which would be necessary to enable men to govern a country wholly dependent on its industries. I take pleasure to quote the following passage from this very interesting lecture:

"Are you aware that in one ton of coal there is as much energy, as much actual work, as may be done by forty thousand good laborers in a ten hours' day? Our best steam engines utilize only one tenth of this energy at the present time. But even now we know that the cost of the most unskilled work done by man is a thousand times the cost of the same work wherever it may be done by the best steam engines. One fact of this kind properly considered is worth many long essays about the effect of the engineer in altering all the character of our civilization. It is labor that is the true standard of wealth. The steam engine has added incalculably to the wealth of the world. We forget that man is no longer needed for unskilled labor, so that when we use unskilled labor we are using the materials which God has given us in the most inefficient manner possible. Furthermore, it becomes sweated labor, it unduly takes skilled labor, it starves invention, and it brings up base, ill-fed families."

If this was true ten years ago, in England, it must be true today, in this country, to a still higher degree. No civilized country has such enormous natural resources as has this country and in no other nation can the labor question be more acute than what it is in the Uniter States today. There seems to be a feeling of general unrest in the air, and one asks another "What is going to happen?" "What will come next?" There is a wave of crime and misery sweeping the continent, graft and corruption in government affairs are so common that we think little or nothing about it; the chase after the "almighty dollar" has become more furious than ever, and we are forced to admit that there is some truth in the statement that a great number of the American people have recognized an eleventh commandment, which reads: "Get the money, no matter how, but get it."

If people could only be taught to believe that by looking after the well-fare and happiness of their fellow-beings their own interests would be strengthened and promoted, how much would this not affect these cruel conditions. If people would only believe the philosophy of the greatest reformer of all times, that those who seek first the happiness of their fellow-men need not worry about their own, how much more contentment and happiness would we not find. And it is people with this spirit that we need to change our presentday conditions; it is engineers with this spirit that we need because it is engineers who do things, and it is engineers who

shall finally govern countries, and the world, and they shall see to it that the raw material which God gave us is not used in its most inefficient form, or that forty thousand laborers are not used to do the work which can be done better by a ton of coal, a boiler, and a steam engine.

The professional politicians have shown, for generations, in the most flagrant way possible, that they are not capable of governing a country as it should be governed. It is up to the engineer to take the politician's mantle. Our kings and dukes of industry have shown that they are not capable of solving the labor question. It is up to the engineer to do it. It is left to the engineer to harness the forces of nature, to promote sound industries, to build well lighted and well ventilated factories and while so doing always to consider as the prime factor the happiness and contentment of those beings whose mission it is to see that wheels of industry keep on running after they have once been started.

You often hear a young man nowadays complain about the difficulty of "getting ahead," how much better it was "in the good old days" and what a "snap" the "old man" had compared with himself, and so on and so forth. There is some truth in this. But it should not make a young man discouraged, on the contrary, it should serve as an incentive. We all know that it is easier to start a work than to finish it; and be sure that the work which the "old man" started is yet far from finished. You can begin to chisel a piece of marble of which you want to make a statue with a rather coarse took, but when you come to perfect the figure, or the features, and so to say put character and soul into the work, you have got to use a mighty keen and fine instrument. Which, in your opinion, is the most important and which carries with it the greatest responsibility? And this is why "the old man" in "the good old days" was said to have a "snap" while the young man of today is complaining about invincible difficulties. The "old man" was using the coarse chisel and was getting along very nicely, because it was working in the rough. But today this chisel is worthless, today is the time when commences the work of putting character and soul into the monument which the old man roughed out, and to that, keener and more delicate instruments are required. It is up to the young man of today to acquire these instruments, and it is up to all of us who are engaged in this finishing work to keep our instruments in the right condition, that they do not spoil the delicate material with which they may come in contact.

History teaches us that a nation, a people, cannot for any length of time remain at one and the same point on the scale gauging its civilization, its culture. It is either a case of further progress or one of—regress. History also tells us of people swinging inte power and climbing the ladder of civilization up to the highest rung of its time, how they all, without exception, whether slowly or precipitately, always surely, fell back again into oblivion or were conquered and enslaved by some other nation inferior to them in culture and refinement, but superior in mind and morals. In casting a glance backwards on the tribes or nations of the world one is almost tempted to believe that with the highest culture and civilization came a relapse in morals and a decay of the mind. And these two—looseness in morals and mental pollution, have been and are the surest enemies to the progress of mankind.

America is today, in many respects, leading the world. The progress of the American nation is nothing short of marvelous; it has reached a stage which people before us never dreamt of. Will it climb still further or has the curve reached its maximum? Will the 20th Century go down in history as the turning point of a great peoples' great fight for progress, or will it, for generations to come, stand out as a monument for the advancement of mankind, for deeds accomplished, so great, so glorious as to surpass by far even the boldest dreams of the boldest among us? It depends on us, it depends on the engineer of today, what the record will look like. We have the keys of the future, it is up to us. May each one realize the responsibility which rests on him no matter what his position is, and may each one do his duties, not only those necessary for existence, but those which he owes to his fellow-man, to society, to mankind.

We will now go from generalities to a few specific examples, which will illustrate some details of what has been said.

Some time ago Senator Aldrich stated that if the U. S. Government was run on sound business principles it would mean a saving to the country of \$300,000,000 per year. President Taft himself has stated that \$40,000,000 are wasted annually in the War Department. Take the Panama Canal. It was estimated it would coast \$170,000,000. It is no longer a secret that in all probability it will run over the \$500,000,000 mark before it is completed. The appropriation for forest service from 1896 to 1910 was \$20,000,000. Of this a little less than \$2,000,000 were used for actual improvements of the national forests. The District of Columbia once borrowed from the government \$21,000,000. The District of Columbia has now forgotten that it ever borrowed this money, and the government is now trying to collect it.

I could quote hundreds of examples like this. What do they all show, what do they prove? They prove the truth of what has already been said, that the professional politicians are incapable of running the affairs of this country as they should be run, and that it is high time that others should take their places. These others should be **Engineers**, not necessarily lawyers or orators—the should be experts in their various lines, they should be men with morals—and hearts.

The arid region of this country covers an area of about 600,000,000 acres. It is estimated that 10 per cent of this, or 60,000,000 acres, can be reclaimed by irrigation. And the natural resources of this region are so great, the deposits of iron, coal, petroleum, etc., are so immense that figures hardly give us a right conception of their magnitude. At present this immense wealth is, so to speak, put in cold storage. The government, through its "conservation" act, withholds these resources from the people. Some time, when the government has grown a little, these areas with their wealth will be thrown open to the American people, to the korld, and will be forced to yield to humanity their latent and hidden treasures. The field that this will open for the Engineer can only be speculated upon.

There are over 30,000,000 H. P. in water falls in the mountain streams of the west. This power is now wasted because it cannot be developed. The government, having no right to the water, took the land wherever there was a possibility for making a development. Think what a loss to the country of having this power going to waste. Think how many millions of tired hands could be supplanted by the electric motor, if these waters

were developed. This is something for the electrical Engineer to think of. Some time since Louis Brandels, I believe, made a statement that \$1,000,000 per day could be saved by the railroads of the U.S. through scientific management. Here seems to be a great field for the efficiency Engineer. Waste, in no matter what form, is not only objectionable—it is a wrong, it is an abuse of the material which has been intrusted to us.

And while we are talking about savings and efficiencies, let me quote another example. There are today about 200,000 industrial plants in this country, having an aggregate annual output of \$25,000,000,000. It is a fact, because it has been proven, that proper lighting increases the output of from 2% in steel mills to 10% in textile mills and shoe factories. Let us say that on the average the increase is 3%. This menas a saving of \$600,000,000 per year, or \$2,000,000 per working day. Just think of it. The electrical engineer can save this country \$2,000,000 per day simply by providing proper lighting for its factories. And in these \$2,000,000 is not taken into account the improved quality of the output, neither the savings due to decrease in accidents and deaths.

It must not be forgotten, however, that this enormous saving is due to the bettered lighting conditions only indirectly. Directly, of course, it is due to the help, the operatives. And it is well to bear this in mind. Because if such a factor as artificial lighting, properly considered, is of so great importance, how much more important are not such factors as proper buildings, proper ventilation and proper working conditions in general.

Statistics for this country show that the average cost of all finished products is made up of ½ labor and ¾ material. Labor, therefore, is a big factor in the cost of turning out our products. Increased efficiency of labor should mean a considerable reduction in prices and a saving for the people and for the country. Labor efficiency is dependent upon the help, upon the individual, and more closely, upon the will of the individual. This, in turn, is influenced to a great extent by the physical conditions under which the individual is working. Any arrangement, system or rule, which improves the conditions under which a man works, does not only have a conscious, physical effect upon the man, but a subconscious mental effect upon the man's will. The result of the first is physical improvement, contentment with conditions and increased happiness, the result of the latter is interest in the work and increased efficiency.

This is not guess work. It is facts which have been demonstrated over and over again. And only by having these facts clear in our minds can we engineers rightfully pursue our profession. It teaches us, that when we are designing a factory, a mill, an industrial plant, if we wish to properly guard the interest of our client, or ourselves, the means of doing so is by guarding the interests of the people who are to work in these places. We should design the best buildings that we know how, provide for plenty of light and air, provide pure water and anything that tends to safeguard life, health or happiness of the workers. Mere business principle tells us that this is the right thing to do, because the cost of bringing this about is inconsiderable compared with the enormous savings which result from increased efficiency in laboor, as has already been pointed out. If the introduction of proper lighting alone in all the industrial plants results in a saving were all the plants of modern construction, equipped with proper ventilating or air purifying systems, cleaning systems, etc., etc.—in short,

ideal plants? This of course can only be speculated upon; the result must be stupendous.

But there is another side to this, far more important than that of investment and profits; that is the human side. We must remember that this country is dependent largely upon its industries, the industries are dependent upon the working classes and therefore the country is dependent upon them. If a man, for his existence, is dependent upon a certain something, he is mighty sure to take good care of it. A fisherman is pretty careful about his boat, a hunter about his gun or dog. A laborer is more than a thing or an animal. He is human, same as you or I, he has a mind and a soul and is subject to the same feelings and emotions as we are. He should be taken care of, he should be treated as we, ourselves, wish to be treated. He is a machine in the first state of development. We owe it to God, to him and to coming generations to develop and perfect this machine. This cannot be done by force, law or harsh treatment. It requires experimentation, patience and good will. It requires also enthusiasm and the setting of good examples.

"The truest stories about man are the fairy stories; they are true at all times, of all races of men, and the truest fairy story is that which tells how men who looked back and not forward are turned into lumps of rock or pillars of salt."



## Idealism and Engineering

By G. A. AKERLIND

Member of the Society.

At the meeting of The Swedish Engineers' Society of Chicago, May 17th, 1913, our fellow member, Mr. Theodore A. Bergen, Chief Electrical Engineer with Lockwood, Greene & Company, Chicago, read a paper entitled "Progress and Engineering." The paper caused a near panic as the subject was treated so radically different from the matter of fact style supposed by ancient customs to be the only way an engineer can or may discuss anything before a body of engineers.

The paper referred to is printed in our Year Book for 1913 and certainly demands our serious attention. I am fully aware that many will question whether an engineers' society or engineering publication is the proper forum for discussing such subjects as Mr. Bergen's paper suggests, but why not?

Who have designed our modern mining methods and mining machinery, our blast furnaces and steel mills, our railroads and its equipment, our steam ships and the machinery for their loading and unloading, our war vessels and canons, the machinery for fabricating the thousand and one different articles that now are necessities of life, the process and machinery for making cement. We discovered and worked out the chemical process by which organic and unorganic matter, previously uscless, now is a necessity for our industries? Who have put electricity to work, replacing

the horse and man and eliminated distances? Who have designed our bridges, our tunnels, our skyscrapers, our cities?—and keep on as long as you please, at the end you will find—the engineer.

If the engineer has been able to accomplish all those things, then he might be expected to understand something of other human activities tending to better the existence of the human race, but must we not acknowledge a strange absence of engineers in most such activities. True, he may design at the request of a philanthropist or "civic body," a dwelling with warmth, light and air and sanitary appurtenance to properly house "poor people, '' but thus he affiliate himself with any movement to try to moderate or lessen the gulf that seems to be widening between the care takers and the taken care of, or the so called nonproducers and the producers? Where do you find the engineer in the administration of communities? You may find saloonkeepers and bartenders and all sorts of men there, but rarely, if eyer, will you find an engineer. You will find him tucked away in a corner, "a hired man," working on drawings and specifications for necessary improvements of the community, at every turn hampered by "considerations" of politicians and their constitutents, eager to get something at the expense of somebody else.

Why should the engineer always be "the hired man"? As he is absent from the government of smaller communities, so of course he is absent from the larger. Whoever heard of an engineer in the State Legislature or in Congress? But we do hear of appointments to "important" positions and when we learn of the appointees' previous training and carrier, we do not know whether we should weep or laugh. Is it not peculiar that the engineer with his long expensive training and his accomplishments should be a factor of so very little moment in our communities and nation's social, political and humanitarian advancement. Some of the reasons for this, I think are not so difficult to see, but may be passed here for the time being.

The most important thing for the engineer at present is to wake up and realize his duties and his opportunities. With such realization will come an effort for a change, an improvement, and the engineer's day will come when he will no longer simply be the polished tool, the scientific encyclopedia applying the accumulated engineering knowledge of centuries to accomplish the wonders of our industrial age, and for a compensation we are not proud to speak of, but he will take the place that is rightly his in the front rank of the idealists who strive not only for the ultimate perfection of the means of production but also for the ultimate perfection of humanity, high morals, justice and happiness.

When I went to work as a boy, the working hours for older men in the mill was from four o'clock in the morning until eight o'clock at night, and for younger men from six o'clock in the morning until eight at night, and some ten years later, the ten hour work day was established. This ten hour day seems to have been the standard for industrial nations for the past twenty or thirty years, and strange enough seems likely to remain the standard for some years to come.

What is the proportion of output, result of labor, of the man of today, compared to the man of say twenty years ago? Nobody knows, but those in the harness for the last thirty or forty years may make a guess for the branch with which he is familiar. Is it one to two or one to four or one

to ten? Suppose the man of today produces as much as two men twenty years ago. Is it not strange that the man of today should have to work ten hours a day just the same as the man twenty years ago? Where does the much talked of benefit of the advancement of civilization come in?

It is no wonder that the universities are establishing departments for the study of social problems. Any one who cares to see things as they are and reflect over what they ought to be, or could be, can not fail to realize the complication of the problem, and the apparent hopelessness of the situation. Can poverty be obliterated by alms? Will slums in the large cities disappear because of slum work? Some good people seem to wish us to believe that that is the only thing that can be done and even intimate that poverty is a God-made institution!

"The social problem" will come more and more to the front not because the top layers of the pyramid of society are anxious for improvements, but because the bottom layers refuse to believe that their only function on this earth is to work, "produce" and die. Statesmen and scholars, priests and reformers, are endeavoring to locate the trouble and to find a remedy. Where have the engineers been all this time? The capitalist decides to build a steel mill and the engineer is put to work. He figures out the buildings, machinery and apparatus needed for a certain output and the amount of capital required. He figures labor at its market value—that is to say the lowest possible figure to get men to work for and the cost of producing a ton of steel is determined. Here the engineer's function generally ends and the managers starts.

"Labor" is for the enegineer a mere quantity like horse power, and regarded very much like phosphor in steel, an evil that by all means ought to be driven out, and I believe that it is this idea and the possibility of earrying it out to its fullest extent in this country, that have made such records possible of which we now boast.

But where comes the human element in in the engineer's calculations? Well, that is mostly an "unknown quantity" and if considered at all, it must cost as little as possible and barely meet the requirements of existing laws. Can the engineer do anything in this matter; isn't he merely "a hired man''? Well, yes here is where the idealist engineer will have an opportunity. Suppose he had studied "sociology" not only from the books but from real life and had a desire to do unto others as he wished others to do unto him, to do what he could to make it a little easier for his fellowmen, and not harder, to help carry "the white man's burden," to prove himself an engineer with brains and a man of heart. Don't you think he would find opportunities to put into his calculations and his plans a little more of the human element which may cost some gold to be sure, but that would tend to improve the conditions now existing. We now have a great many specialized engineers. Is it not time to add a man to the list, the "Social Engineer," who applies his training as an engineer to endeavor to bridge the gulf between the automatic machine and its operator, between "capital and labor," between riches and poverty.

Let us have more idealism in engineering, let the engineer apply his knowledge, his genius, his brains as intensely as ever, but let him be more and more a man of heart.

# THE OPERATION OF A MODERN TELEPHONE EXCHANGE

A Paper Read Before the Swedish Engineers Society of Chicago October 18th, 1913, by

F. W. IGGBERG.

In previous papers read at the Swedish Engineers' Society we have heard about rapid transit communication and the production of electricity and gas leaving us only one more public utility, the telephone, to discuss.

This subject is by far not as simple as we consider it and it will be necessary for me to touch only on a few main features of the art of telephony and that very lightly on account of the tremendous scope of the subject. In only one part of this talk will I go into the technical end of it at all, and that is the operation of the main circuits required for connecting one subscriber to the other, which probably will be of interest to most of you.

The conception of the possibility of transmitting speech by electricity seems to have occured to many long before it was accomplished. Although the telephone is now taken for granted by most people as if it were a part of the natural phenomena of this planet, it is in reality only a few years since it was invented. In fact, the invention was made as late as 1875, patented 1876, and exhibited to the public the first time during the Centennial Exposition in Philadelphia the same year.

The inventor, a young Scotchman, Alexander Graham Bell, was during this time a professor of elecution and a teacher of deafmutes in Boston. Being an ardent student of the science of electricity, then you might say in its infancy, he stumbled over the principle of the telephone while experimenting with a system of multiplex telegraphy.

The original invention consisted of a thin piece of iron glued to a thin diaphragm made of skin, an electro-magnet supported close to and in front of this piece of iron and a line connecting it with another instrument like it.  $\Lambda$  battery was inserted in this line to energize the magnets.

The theory you of course all know, but it may not hurt to repeat it. As you speak in front of the diaphragm the sound vibrations cause this to vibrate also. As the distance of this diaphragm from the electro-magnet increases and decreases, the lines of magnetic force threading the coil vary, inducing an electromotive force in the winding. As a closed path is provided a current will flow through the winding of the magnet at the other set. The change in strength of this magnet will cause the diaphragm to vibrate in exactly the same manner as that in the first set, causing the sound to be reproduced.

Later the battery was removed from the line and permanent magnets substituted. This removed a lot of noise from the line but made the instruments very weak, and it was only after the introduction of the transmitter by Edison that the telephone could be used for any great distances.

In the transmitter the diaphragm is made to act upon carbon granules, the resistance of which varies greatly as the pressure varies, thus increasing and decreasing the amount of current sent out on the line.

The next big step is marked by the introduction of the induction coil in the circuit. The change in resistance of the transmitter is thus accentuated by reducing the resistance of the line to that of the primary circuit. The coil, which is nothing but an ordinary transformer, also steps up the voltage of the current, thus reducing the loss in transmission through a high resistance line.

These instruments, with slight modifications and improvements, are still in use.

The original telephone was directly connected with only one other instrument, and no means were supplied to connect it with anybody else. Under those circumstances progress was of course very slow and it was only after a connecting panel or switchboard modeled after the telegraph panels than in use was introduced, that the telephone became of any commercial value.

This panel was followed by the Gilliland peg-switchboard and later about 1878 by the original form of the present day switchboard designed by the engineers of the Western Electric Co.

In this board the subscribers lines and their associated signals were terminated in one single place in the face of the switchboard and connections were made by means of flexible cords.

These switchboards, however, could only handle a few lines, as the operator had to reach each and every line and a system of transfer lines between the operators was installed whereby the call that came in to one operator could be trunked to the operator who handled the line of the called subscriber.

This was a very slow process and was soon superceded by the multiple switchboard in which each line in addition to being terminated in front of one operator with both a jack and a signal, also was multiplied with a jack in reach of every operator in the exchange.

The original multiple boards were started as early as 1879 and although it has been much changed and much improved since that time the principle has survived and is used in every modern exchange today.

All of these switchboards were of the magneto type with batteries and a hand generator in each subscribers set and are usen even at this time in small central offices.

For the larger exchanges however the switchboards have kept changing and improving right along. The invention of the lamp signal was a great step forward and may be the most important change was the adoption of the so-called common battery system in the early nineties.

In this system one battery located in the central office furnishes all the current required as well for talking as signalling and greatly simplifies the subscribers sets.

The multiple common battery switchboard is the type now used, of course, with a great deal of improvements since it was first gotten out.

The development of the telephony has been done almost entirely in the United States and very little has been added by Europe. In fact, with the exception of the work done by Henry Cedergren of Sweden and some addition to the instruments for long distance telephony, also of Swedish origin, you may say that the development is entirely American.

Most of the European countries with the exception of the Scandinavian countries, Germany and England have not taken kindly to the telephone, and their phones are few and of an out-of-date construction.

Since we now have followed the marvelous development of the art of telephony up to the present time, I will take the liberty to take you on A SHORT TRIP THROUGH A MODERN TELEPHONE EXCHANGE such as is used today in Chicago, New York and other large cities.

The wires from your telephone, as they leave your house, are run to distributing boxes placed all through the city at certain intervals on poles or back fences. These are connected to a system of underground cables by means of a small lead covered cable which is spliced into a larger cable at the nearest manhole.

All these cables again are run to a manhole in the immediate vicinity of the exchange and spliced into 600 pair cables which are run into the terminal room of the exchange and terminated on what is known as the MAIN DISTRIBUTING FRAME. On one side of this frame called the vertical side are mounted protectors by means of which the apparatus inside of the exchange is protected from lightning discharges or high potential currents. To this side of the frame are connected the wires from the outside cables and to the other side or the horizontal side is connected a set of cables, the other end of which is connected to the horizontal side of what is called THE INTERMEDIATE DISTRIBUTING FRAME. This side is also connected by means of cables to the multiple jacks in the switchboard. The other side of this frame is cabled to the answering jacks and lamps and also to the relays.

The two sides of these frames are connected by means of loose so called jumber wires. The object of these frames is to make it possible to connect any line in the multiple which, of course, has a fixed number to any cable pair running to any part of the exchange district, also to be able to use any answering jack in connection with any numbered line. This is made possible by only changing the cross connections at the frames and means that the same number can be given to a subscriber even so his telephone is moved and that a line can be changed to any operator without changing the number.

Suitable iron racks are also provided for mounting line and trunk relays and also the repeating coils in the cord and trunk circuits. These are called simply RELAY RACKS and COIL RACKS.

The power equipment required to handle an exchange, although it may have as many as 10,000 lines, is surprisingly small and simple.

A 48 volt STORAGE BATTERY is supplied. This is tapped at 24 volts for all talking circuits and most signal circuits the 48 volts being used only in connection with the ringing machine. This storage battery has one side grounded, usually the positive. A MOTOR GENERATOR SET is provided for charging the battery, usually utilizing whatever commercial current is available but also arranged to be run by a gasoline engine in case of emercency.

A couple of motor generator sets with interrupter attachments are also provided for ringing purposes.

These furnish either alternating current to every other segment on the RINGING MACHINE, the other segments being connected to the 48 volt battery or is by means of a superimposed battery current changed to a

pulsating current, positive or negative, as desired for ringing party lines.

A POWER BOARD is, of course, provided, on which all switches and starting and measuring instruments are mounted.

All battery connections to the switchboard are distributed from a FUSE PANEL. All of these battery leads are fanned out over this panel and connected with lugs. These lugs again are connected to the battery bus bars through 1½ ampere fuses. The size of the fuse indicates how little current really is required for talking as well as signaling. One single lead like this takes care of twenty line lamps in parallel in general practice without blowing the fuse and in fact could supply current to a lot more.

In order to provide means of testing, a Wire Chief's Desk is required, in all offices. This desk is equipped with complete circuits and instruments for testing the outside as well as the inside end of the circuit and also plugging up lines to take care of all calls on lines that are not working properly.

All wiring, as I have mentioned before, run from the terminal room into the operating room in a number of cables supported by cable racks fastened to the floor beams above.

In the operating room you will find two separate lines of switchboards and a number of desks.

These switchboards are constructed of wood on an iron frame and arranged for jacks and lamps to be mounted in the front, keys, lamps and plugs in the keyboard and relays in the rear of the board. All cabling to the answering and multiple jacks is also run inside of the switchboard.

The subscribers' lines are terminated in the so-called subscribers' switch-board in an answering jack with an associated lamp. The keyboard equipment consists of cord circuits for connecting the lines to other lines or to trunks to other exchanges, a multiple of which is played in front of each operator.

In the trunk switchboards, which are rather similar to the subscribers' board, the keyshelf is occupied by cords and lamps belonging to trunks from other exchanges and the entire front is occupied by jacks, as many as 10,400 in each section. These jacks are each connected to a subscribers' line and are multipled, that is reappear in the front of each SECTION so that a jack for every line terminating in the exchange is within reach of every operator.

The regular operators are not allowed to answer any questions or complaints, except giving the time, which makes it necessary for them to switch such calls to a supervising operator often without the knowledge of the calling party.

This makes it necessary to provide several desks for such operators, and in the ordinary exchange you will always find an information desk, a chief operator's desk, and a manager's desk, each equipped with direct connections with each other and with the switchboard, also listening in lines making it possible for them to observe an operator without her knowledge.

While we are talking about the switchboards a few words about the main circuits may be in order.

A SUBSCRIBER'S LINE CIRCUIT includes the wiring from the subscriber's telephone set through the frames and the relay equipment to an answering jack with lamp in front of a certain operator. This line is also multipled in front of the second operator to the right and left, making it

possible for them to help out in case this operator is crowded, while the other operators are not busy. A multiple of each line also appears in front of each trunk operator.

Each subscriber's operator is supplied with from 15 to 20 usually 17 CORD CIRCUITS. A cord circuit is terminated in two cords with attached plugs. These with the intermediate wiring serve to connect one line to the other. These circuits are supplied with means for furnishing talking current to the subscriber's line, with signalling apparatus and keys for ringing and for connecting the operators telephone set to the line. THE TELEPHONE CIRCUIT is terminated in jacks into which the operator connects her head receiver and breast transmitter by means of a cord and plug.

A CALL WIRE CIRCUIT consists of a pair of wires running from each subscriber's position to the trunk switchboard in all offices in the same exchange district.

It is terminated in a key in the subscriber's switchboard and is bridged directly across the operators telephone set in the trunk board. This makes it possible for the subscriber's operator to talk directly to the trunk operator without calling her, simply by pressing down the key.

A trunk line constitutes the means of connections from one exchange to another. It is terminated in a multiple in the subscriber's switchboard and in a cord with plug attached in the trunk twitchboard of the other exchange.

The trunk circuit is also equipped with means for furnishing talking current with signalling apparatus and with automatic ringing apparatus.

A few of the names of apparatus I have mentioned and their use may not be entirely familiar to you, so I will try to explain them in a few words.

THE SUBSCRIBER'S TELEPHONE SET consists of transmitter, receiver, switchhook, induction coil, condenser and ringer. I need not go into further detail about the first two. The switchhook serves to open and close the circuit, thus operating the signals at the switchboard and saving battery current when the set is not used.

The condenser provides a path for the alternating ringing and talking currents but leaves the circuit open for battery current, and the induction coil serves a double purpose; that of changing the varying direct current from the transmitter to an alternating current of stepped up voltage, and also as a device for vastly increasing the range of change in the transmitter set.

A JACK is a piece of apparatus designed for conveniently terminating telephone lines in a switchboard. It consists of a set of springs insulated from each other. One end of these are arranged for wire connections and the others are so formed as to make contacts with the rings of a plug when inserted into the jack.

These PLUGS consist of metal rings, insulated from each other and connected to a flexible cord with metallic conductors inside, and constitute the means of connection from one line to another. In a regular switchboard three separate contact points are provided called tip, ring and sleeve, counting from the point towards the cord.

A KEY is a manually operated switch consisting of a number of springs which by means of a lever or plunger can be made to make or break contacts as desired.

LINE CCT MULTIPLE JACKS ANSWERING JACK CALLED SUBSCRIBER BETWEEN TWO SUBSCRIBERS IN DIFFERENT EXCHANGES TRUNK CCT CALL WIRE CCT TRK MULT SACK TO TELEPHONE CCT CORD CCT TO RINGING CUT CALLING SUBSCRIBER AMSWERING JACK JUTIPLE JACKS LINE CCT

DIAGRAM OF CONNECTION

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A RELAY again is an electrically operated switch consisting of an electro-magnet operating an armature which in turn makes or breaks contacts as desired. Most common of the relays is the one in each line circuit consisting of a double relay, the line and the cut-off relay. The former governs the line lamp and the latter disconnects the signalling apparatus from the line, clearing it for talking. The supervisory relays are also often mentioned. These govern the operation of the disconnect lamps in the cord circuit and hence their name.

The switchboard LAMPS are small carbon-filament lamps made for different voltages from 4 to 48 volts, requiring very little current for operation, say about .1 ampere. These lamps have contact plates on each side and are inserted in the circuit by simply pushing them into a socket made for the purpose.

The INDUCTION COILS and REPEATING COILS are simply transformers. We have already seen how the former is used. The principal use for the latter is for the purpose of inductive association of two circuits that are conductively separated, such as in the trunk circuit and to permit the introduction of continuous current from the central office battery into the line without producing an appreciable loss in the alternating speech current as is done in the cord circuit.

Since we have now taken a fairly good view of the exchange and familiarized ourselves with the principal pieces of apparatus used and their peculiarities, I will attempt to show step by step WHAT HAPPENS IN A TELEPHONE EXCHANGE FROM THE MOMENT THAT YOU REMOVE THE RECEIVER FROM IT'S HOOK UNTIL YOU REPLACE IT, AFTER A COMPLETED CALL.

The simple operation of lifting the receiver from its resting place closes the circuit through the primary winding of the induction coil in your telephone set and the winding of the line relay, thus energizing and operating the line relay.

The operation of this relay connects the lamp in front of the operator to one side of the battery. This lights the lamp as its other side is permanently connected with the other side of the battery.

The operator will then answer the call by inserting her answering plug into the answering jack of your line with her right hand at the same time throwing her listening key with the left, thus bridging her telephone set across the line.

The circuit is now complete from the battery trough the repeating coil, the plug, the answering jack, your telephone set, the jack and plug again and through the winding of the supervisory relay back to the battery furnishing talking current to the line.

As this relay then operates it closes the circuit through the cut-off relay, thereby operating it and disconnecting all signal apparatus from the line, leaving it ready for talking and ringing.

The line relay will then return to normal, extinguishing the line lamp. The operator can now talk to you and will inquire about the line desired. She will then operate the key on the call wire to the exchange in which the line of the called subscriber terminates. This puts her in direct connection with the trunk operator at this exchange, who is told the number desired.

The trunk operator will in reply give the number of the trunk she intends to use and at the same time touch the sleeve of the multiple jack to the called subscriber with the tip of the plug for this trunk. If this line were busy this would cause a sudden flow of current through her telephone set, causing a distinct click to be heard.

If not she will insert the plug into the jack. This completes the circuit through relay "A" and the trunk lamp, operating the relay and lighting the trunk lamp. At the same time the cut-off relay in the subscriber's line is operated, clearing this line for ringing and talking.

At practically the same time the subscriber's operator has plugged into the outgoing trunk multiple of the same trunk with the calling plug of her cord circuit.

This completes the circuit through the sleeve of the plug and the cord lamp, lighting the lamp. It also closes the circuit through the 1000 ohms winding of relay "B" and the supervisory relay operating the former, which is a very sensitive relay, but not the latter.

The operation of relay "B" closes the circuit through the winding of relay "C." operating this relay and at the same time shunting out the lamp.

The fact that the lamp has gone out tells the trunk operator that the subscribers operator is connected to the line.

The operation of relay "C" disconnects the calling subscriber's line and instead connects ringing current across the line of the called subscriber through relay "D."

This ringing current is supplied from an interrupter with the one and larger segment connected to a 90 volt generator, and the other segment to a 48 volt battery. This arrangement is the reason why our telephone bells ring a short while, are silent, ring again, etc.

As soon as the subscriber removes the receiver from his hook the battery circuit, which is then complete through relay "D," operates this relay, opening the circuit through its contact and causing relay "E" to operate.

The operation of relay "E" shunts out relay "C," restoring it to normal. This disconnects the ringing current and closes the circuit through the winding of relay "F," operating it.

The operation of this relay throws the low resistance winding of relay "B" in parallel with its high resistance winding, reducing the resistance and operating the supervisors relay in the cord circuit, shunting out the lamp, thus letting the subscribers operator know that the called subscriber has answered, and the call is completed.

When the conversation is over the calling subscriber hangs up his receiver. The switch hook then opens the circuit through the supervisory relay, releasing it and lighting the lamp.

When the called subscriber hangs up his receiver the circuit is opened through relay "F," releasing it, also opening the low resistance shuntwinding of relay "B" and releasing the supervisory relay in the cord circuit, lighting the lamp.

The two cord circuit lamps are now burning in front of the operator, giving her signal to disconnect, which she does by pulling out both cords. This restores all apparatus in the subscriber's line and the cord circuit and opens the circuit through relay "B," releasing it.

This again releases relay "E" and removes the shunt from the lamp, lighting it.

As soon as the trunk operator sees this lamp she pulls out the trunk plug from the multiple jack, thus restoring the trunk circuit as well as the called subscribers line.

As you see the operation of connecting one subscriber with the other is not as simple as most people think and I hope this little description will at least help you from getting impatient at the least little delay in getting your party. I will also call your attention to the fact that when you move your switchhook up and down to attract the operator's attention this should operate the relay, lighting the lamp.

This takes a little time and it is funny to know that when you get real furious and move your hook up and down yith a tremendous speed the operator is entirely unaware of your strenous effort. Pull the hook three or four times slowly and you will be surprised to see how quickly the operator will answer.

The call I have just finished talking about is termed a local call. This includes calls to subscribers in the same exchange where your telephone is terminated and also calls to subscribers of such exchanges as have direct call wire connections to your exchange. All calls to other points are termed TOLL OR LONG DISTANCE CALLS and are handled through special toll exchanges supplied with toll and long distance trunk facilities for connecting you to almost any place in the country. The operations necessary to complete a connection of this kind are many and varied and too complicated to describe in detail, but I will attempt to cover the principal ones. When the operator at the local exchange is told that the subscriber wishes a long distance call, she will plug one end of her tone test cord into the first not busy recording trunk to the long distance office and the other end into the subscriber's answering jack after her answering cord has been removed. The tone test cord used will notify all operators that your line is held waiting for a long distance call even after you have hung up your receiver.

The plugging into the recording trunk signals the recording operator at the nearest toll exchange and she will find out who you wish to talk to and if possible the number of the called subscriber. After she has repeated the order and filled out a ticket with all the information you are able to give, she will request you to hang up your receiver to be called later, when the connection is completed.

The recording operator then procures the calling subscriber on a toll switching trunk to his exchange and holds the line by means of a holding cord inserted into the jack of the switching trunk.

This gives a disconnect signal to the subscriber's operator, who pulls out the plugs of her tone test cord and is no longer interested in the conversation.

The toll ticket has by this time been sent by the recording operator through a pneumatic tube system to a directory table for any lacking information, from there to a distributing table and finally to the outward toll operator, handling toll lines to the toll point desired.

Upon receipt of this toll ticket the outward operator secures the line of the calling subscriber by inserting one end of her cord circuit into her multiple of the switching trunk. This gives the disconnect signal to the recording operator, who pulls out her holding cord and is then through with her part of the call.

The outward operator will now secure a connection with the inward toll operator at the terminating toll center desired and instruct her as to the

called subscriber's number. The inward toll operator will then get into communication with the party wanted, while the outward operator remains cut in on the toll line.

When the called party answers he will be requested to hold the line for a long distance call, while the outward operator of the originating toll exchange calls the calling subscriber back to the telephone. As soon as he answers he is told that the party he wanted is waiting for him, his line is connected to that of the called party at the outward toll position and the connection is complete.

In this connection it is interesting to know that through the introduction of the Pupin loading coil in the long distance lines the reach of the telephone has been so far extended that you are now able to talk from New York to Denver and within a few months the extension to San Francisco is expected to be completed.

The cost of this long distance line is of course enormous, as they have to be constructed of heavy copper wire so as not to offer too great resistance to the low voltage current used. It is therefore necessary to use these lines to their full capacity and this is done by using the wires for sending telephone and telegraph messages over the same wires at the same time.

A COMPOSITE CIRCUIT is a circuit so equipped that one telephone and two telegraph connections each way may be maintained in operation over one pair of wires at the same time.

A PHANTOM CIRCUIT is a circuit so equipped that three telephone connections may be maintained over two pairs of wires.

To use these lines to their full capacity then we will find that all busy lines are composited as well as phantomed, making it possible for 22 people to carry on telephone or telegraph communications at the same time over two pairs of wires, indeed if quadruplex telegraphy is employed, as sometimes happens, this number may be increased to 36.

In this connection I think some TELEPHONE STATISTICS OF THE WORLD may be of interest.

There are approximately 12,500,000 telephones and 30,000,000 miles of telephone wire in use, representing an investment of \$1,750,000,000.

The annual number of telephone conversations may be placed at 22,000,000,000, about five times the number of passengers carried by all the railroads of the world.

The busiest telephone exchange is Courtland Street, New York, which handles an average of 200,000 calls a day with 200 operators.

The following chart will give you a good idea of the telephone development in the world today.

	Number of	Telephones per
Division	Telephones	100 Population
United States	8,000,000	8.1
German Empire	1,100,000	1.6
Great Britain	700,000	1.4
Canada	300,000	3.7
France		0.6
Sweden		3.4
Denmark		3.5
Norway		2.6
Russia	. 150,000	0.1

The following figures illustrate the telephone development in some of the larger cities.

City Telephones per 100 Population	City Telephones Per 100 Population
Los Angeles24.0	
Stockholm19.9	Christiania 6.9
('hieago11.0	Berlin 5.3
	London 2.8
Philadelphia 8.6	
New York 8.3	St. Petersburg 2.2

All the above figures are, of course, approximate.

At this time the United States have about 67% of the total telephones; Europe has 26% and Canada 2.5%, thus leaving 4.5% for all other countries.

The cost of telephone directories alone for the New York Telephone Co. amounts to \$1,000.00 a day. These directories require 3,500 tons of paper, 7 tons of ink and 228 miles of wire for binding. This paper is made from 5,200 cords of wood, or a forest of 2,500 trees, which would cover an area of 840 acres.

The bell system of America employs 60,000 girls as operators and if you count the private branch exchange operators and those connected with the independent companies, the number will run up to fully 100,000.

One question that I believe is at this time more discussed than any other in the development of the telephone is THE ADVANTAGES OR DISADVANTAGES OF THE MANUAL SWITCHBOARD SYSTEM AS COMPARED WITH THE AUTOMATIC TELEPHONE SYSTEM.

The term manual switchboard would seem to indicate a system where the connection between two subscribers is made by hand without the employment of automatic machinery. I believe we have seen, however, that in the operation of the system I have previously tried to describe, a multitude of automatic labor saving devices have been employed. A study of the development of the telephone systems now used at the present time number of automatic operations have increased, until at the present time the manual operations are in the minority and the name manual does not correctly describe the system to which it is applied. The system is partly manual and partly automatic, indeed a form of semi-automatic.

The term automatic switchboard again would indicate a system where the connection between two subscribers is made by automatic machinery without the employment of manual labor. We need go no further than to the manual operations of removing the receiver, selecting your number and pressing a button which, if all goes well, will call the subscriber, to find that this system is also rather semi-automatic than automatic. In fact, the only way that this system is different from the manual system is that the subscriber himself through several manual operations starts a series of automatic machinery working which ultimately connects him with the number desired, whereas, in the manual system the subscriber is relieved of this labor and the operator performs a few intermediate manual operations between several automatic ones.

The advantages claimed for the automatic systems are first, secreey, second cheapness and third speed.

Now, let us look into each of these items a little closer. It is true that in some cases no operator has to handle the connections, but as it is

business it is to listen in one connection after the other to see that everything is working O. K., it would seem that you get very little more secrecy than with operators who at all times are too busy to even think of listening to a conversation.

The original cost of an automatic system compares very unfavorably with that of a manual system, and the only reason for cheapness would be reduction in operating cost through a reduced number of operators. At the present time a very large percentage of the operators are private branch exchange operators and these would have to remain as well as operators for toll and long distance work and for answering all calls requiring human intelligence. Keeping this in mind we will still be surprised to hear that a computation of the total number of operators required in the city of New York for a manual system would amount to about 13,000 and that for an automatic system to 10,000, not counting the "mechanician operators." A study of the same conditions in the state of Connecticut shows these figures as 890 and 600 respectively. This, I believe, will show that the larger the system the more expensive will the automatic system prove to be.

The larger the system also the larger the amount of delays and the longer the time required to make connections, materially reducing the gain in speed attained at a smaller automatic system.

Taking all these points into consideration it is very doubtful if a large automatic system would offer any advantages over a manual system, particularly after some further automatic features now being developed have been added to the present day manual system.

As only about 2% of the telephone investment is placed at the subscribers stations the public in general does not realize what an immense amount of material is required to carry on telephone intercommunications between 8,000,000 people. Since we have now seen a little more of the other 98% I imagine a few words about THE WESTERN ELECTRIC COMPANY AND ITS HAWTHORNE PLANT, where the majority of this material is manufactured, may be of interest.

This plant is located on the west side of Chicago, between 44th and 48th avenues and between 22d and 26th streets, covering an area of over 200 acres.

The factory buildings are all of fire-proof construction, universally equipped with sprinklers, with sections divided by heavy fire walls, metal clad doors, concrete floors, tiled roof and wire glass windows.

These buildings contain 2,500,000 square feet of floor space or nearly 60 acres.

Hawthorne, with its 14,000 workers, is really a self-contained community. Within its gates we find a gas plant, an electric power and lighting plant, an independent system of water supply, a fire department, hospital, library and restaurant with smoking and club rooms. Hawthorne has also its own railroad system, connecting with the transportation lines which surround it.

The gas plant produces over 900,000 cubic feet of gas daily, which, although of lower grade, performs the work required for less than half the cost of city gas.

The power plant is equipped with modern turbogenerators with a capacity of 9,000 kilowatts.

The present consumption of water is about 1,200,000 gallons a day, about the same as for a city of 10,000 population. Driven wells have been sunk

and furnish water at about one-half the cost of that taken from the city mains.

In the water tower which dominates not only the other buildings, but structures of all descriptions within a wide radius, are located six steel tanks with a capacity of 213,000 gallons, directly connected to the sprinkler system and also with hydrants throughout the plant. In the fire-house adjoining the tower a battery of pumps afford an additional water supply of 3,000 gallons a minute as long as the supply in the 5,000,000 gallon reservoir holds out. A trained brigade of paid firemen is maintained at all times.

llawthorne has a hospital for the benefit of its employees with a physician and trained nurses always in attendance, also a restaurant with a scating capacity of 900.

Continued uncertainty in the coal supply due to strikes and other conditions beyond the control of the manufacturer, has made it necessary to construct two storage bins of 10,000 tons capacity, below the ground level. Into these the coal can be dumped from the railroad cars and then be taken out by means of a railroad crane with a grab-bucket. These bins are kept constantly flooded and by these means the losses in heating value of the coal has been reduced to approximately 2% after six to twelve months' storage.

A plant with such enormous manufacturing facilities must of course produce an enormous out-put and if you will permit I will give a few figures.

During 1912 Hawthorne shipped about 9,000 switchboards, 600,000 subscribers' sets, 6,000,000 jacks, 3,000,000 protectors, etc. The cable shipped contained 3,400,000,000 feet of copper wire or enough to stretch around the earth at the equator 64 times.

For this enormous output very large quantities of raw materials are used, and some figures of the input of 1912 may be of interest:

Lead	65,000,000	pounds
Tin	2,000,000	pounds
	21,000,000	pounds
Brass and German silver	2,500,000	pounds
Iron and steel	10,000,000	pounds
Paper	5,000,000	pounds
Crude rubber	500,000	pounds
Lumber	10,000,000	feet
Platinum	\$300,000	worth
Silk and cotton	\$1,000,000	worth



## RESEBREF FRÅN DE SVARTES VÄRLDSDEL

af

## Ingeniör John E. Tjäder.\*

Vi ha härmed nöjet meddela ett längre, synnerligen intressant resebref fran Congo i Afrika af den för talrika svenskar i Amerika bekante ingeniören John E. Tjäder.

Herr Tjäder, som är medlem af Svenska Ingeniörsföreningen i Chicago, afreste i juni sistl. år (1912) härifrån till Stockholm för att bevista de Olympiska spelen. I medio af påföljande augusti erhöll nämnda förenings sekreterare ingeniör G. A. Åkerlind från honom ett bref, hvari han meddelade, att han var stadd på resa till Congo. Han hade ett par veckor förut genom Vattenbyggnadsbyrån i Stockholm fått anställning som ledare för en geografisk hydrografisk expedition genom Kasai-området i belgiska Congo. Expeditionen, som beräknas taga en tid af ett år, har till uppgift att undersöka vissa vattendrag i nämnda besittning. Expeditionen bekostas af Companie du Kasai, ett oerhördt rikt gummibolag, som har koncession på tillgodogörandet af detta områdes produkter.

Herr Tjäder meddelade vidare, att han erhöll denna ansvarsfulla plats tack vare den erfarenhet han förvärfvat i vildmarkerna i Arkansas. Tennessee och Texas, där han vistats ett års tid, sysselsatt med flodregleringar för Morgan Engineering ('ompany, ett af Amerikas största civilingeniörsbolag.

Före sin resa till nämnda sydstater var han i ett par års tid bosatt i Chicago och var här anställd hos civilingeniörsfirman E. Rudolph Company samt deltog i regleringen af llinois-floden 1910. I denna stad förvärfvade den unge, sympatiske ingeniören ett stort antal vänner, som helt säkert glädja sig öfver att ett så stor förtroendeuppdrag lämnats honom och hvilka nu förvisso önska honom lycka och framgång på hans ansträngande och fram faror långt ifrån fria färd.

Sitt intressana resebref har han adresserat till Ingeniörsföreningens sekreterare G. A. Åkerlind. Brefvet var åtföljdt af ett antal originalfotografier, tagna af ingeniör Tjäder själf. Dessa reproduceras här nedan.

<sup>\*</sup> Aftryck från Chicagotidningen "Gamla och Nya Hemlandet".

Ingeniör Tjäder skrifver som följer:

KAFUFU, C. K., den 26 mars 1913.

En ganska lång tid har nu förflutit sedan jag lofvade meddela mina upplefvelser här i vildmarken och orsaken är den, att jag velat samla material samt att jag väntat at någonting skulle hända — någonting hårresande — men förgäfves! Lifvet här för-



INGENIÖR JOHN E. TJÄDER

flyter lugnt och stilla och frånvaron af allt, som påminner om civilisation, gör sig ej vidare kännbar, när man en gång blifvit van vid "naturlifvet". Det är förvånansvärdt hur lätt man faller"! Men — till ämnet!

Åtta månader ha flytt sedan jan vände Europa ryggen. Intrycken fran sjöresan ha något förbleknat, men dess intressan-

taste episoder kanske böra omnämnas. Trafiken mellan Aut werpen och Matadi, Congo, uppehålles af fyra angare, bekvämt, ia, nästan luxuöst inredda. De hamnar som besökas erbjuda mycket sevärdt för européen, som för första gangen skadar de underbara tropikerna. Reguliära uppehåll göras vid Dakar i Senegal: Comakry i Franska Guinea samt Grand Bassam pa Guldkusten. Dessuton passeras ekvatorn, hvilket är en anledning till mycket skämt. På denna speciella resa besökte vi äfven Las Palmas å Canarie-öarne. En särdels intressant plats och känd vinterkurort. På morgonen den 10:de dagen ombord fingo vi känning af resans mål. I stället för det klara gröna saltskum. som vi nära tre veckors tid sett yra och fräsa om fartygets bog, sågo vi nu att ångaren plöjde sin väg genom en gulbrun vätska. Det var Congo-floden, som kom oss till mötes — 200 mil ut till hafs. Tidigt följande morgon passerades Banana, en liten stad vid Congos mynning, och på eftermidd, kl. 5 affyrades ankomstskottet i den lilla hamnen vid Boma.

Boma är hufvudstaden i det Belgiska Congo och en rätt snygg plats. Gatorna äro försedda med cementtrottoarer, aflopp och andra civiliserade inrättningar. Elektrisk belysning, telefon, stora handelshus samt många kaféer — allt finns i Boma. För ordningens upprätthållande finns en kår svarta poliser i blåa uniformer och röda toppmössor.

Största delen af vår last var destinerad till Boma och vi lågo här i två dagar. Såsom representant för ett af de rikaste bolagen i Congo blef jag mottagen i audiens af guvernören. Det vänliga sätt på hvilket jag blef mottagen af den höga officeren samt hans underhållande konversation utgöra ett af mina bästa minnen från resan.

När lossandet af lasten var undanstökadt, lättades åter ankar och vi ångade vidare uppför Congo-floden och anlände efter 10 timmar till Maradi. Här stänges vägen af forsar och fall, och först vid Leopoldville blir Congo åter segelbar. En järnväg sammanbinder dessa två städer. Denne järnväg är ryktbar i många afseenden. Dess skapare är belgiske öfversten Thyss. Sträckan är 400 km. lång och banan slingrar sig fram i otaliga kurvor i den kuperade terrängen. Det tar två dagar att passera

En hvit man har satt lifvet till för hvarje kilometer, under byggandet, summa 400, samt tusentals svarta och importerade kinesiska arbetare. Järn vägen inbragte kung Leopold II och öfverste Thyss kolossala förmögenheter, de s. k. "blodsmillionerna".

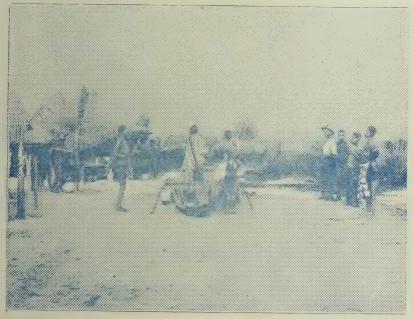
sträckan. Den första dagen arbetar sig lokomotivet uppför, alltjämt uppför, tills man når Thyssville. Här öfvernattas — man kör ej om nätterna! — och som några sofvagnar ej existera, tar man in på hotellet. Tio timmar ha åtgått att tillryggalägga halfva sträckan. Den senare hälften passeras på sju timmar, andra dagen, men nu bär det hela tiden utför — mot Congofloden och Stanley pool.

Från Leopoldville är en liftig trafik på floden. Man ser öfverallt belgiska, franska, tyska och portugisiska ångare — vanligen hjulångare —, som bringa gummi, elfenben och andra produkter till järnvägens ändpunkt samt återvända med europeiska handelsvaror, proviant, krut och dylikt, till det inre. Trettio dagar kan man resa uppför strömmen till de stora sjöarna, och ett par ångare hålla ända till 250 ton.

En af bolagets ångare mötte mig i Leopoldville, och efter två dagars resa på Congo styrde vi in på Kasai-floden. Inkomna på denna stora vattenväg började resan bjuda på särdeles intressanta episoder. Stränderna vimlade af stora faglar, tillhörande vadaresläktet. Tidt och tätt döko stora flodhästhufvuden upp och ofta förvanansvärdt nära angaren. Det erbjöds en utmärkt skottafla för mitt mausergevär, och mer än en fick bita i gräset - eller rättare vattnet. Här och där på sandbankarne såg man spår efter krokodiler som gassat sig i den heta solen. Negerkanoter gledo uppför och nedför floden, ljudlöst och snabbt. Stundom tränger urskogen fram till stränderna och i dess träd skymtar en och annan apa. En papegoja ger ett gällt skrik och en hvit ibis aftecknar sig skarpt mot den mörka bakgrunden. Öfver hela taflan ligger något mystiskt. Vid solnedgången förtöja vi vid stranden. Negerbesättningen skickas i land för att hämta ved för nästa dags resa. Supén dukas på däck. Mörkret faller så hastigt och ogenomträngligt, lamporna tändas och som en följd häraf infinna sig tusentals myggor och andra flygfän.

Efter fyra dagars resa anlända vi till Dima, Compagnie du Kasais säte i Afrika. Här finnes en gentil villa för "afrikanska" direktören, kontorsbyggnader, bostäder för tjänstemän, magasin, mekanisk verkstad, elektricitetsverk, båtvarf för bolagets 20 ångare, hamn etc. Min vistelse i Dima utsträckte sig till fem veckor och slutligen den 12 oktober gick jag ombord å en annan af bolagets ångare, som skulle föra mig upp för Kasai-floden samt dess biflod Lulua. Efter tolf dagar nådde vi Luebo, en plats vid Lulua och ändpunkten för trafiken på denna led. Här började resan öfver land och alla underbarheter från det inre af Congo skulle nu afslöjas!

Klockan 8 på morgonen var vår karavan i ordning i Lucho. Detta den 28 oktober 1912. En brokig samling! Den enda lokalfärgen är svart — svarta kroppar sparsamt inhöljda i brokiga tygstycken. Två och två ordnades våra 80 bärare af sina äfvenledes svarta förmän, hvarje par om en börda, hvar och en bestående af en koffert, låda, säng, badkar, vindamejeanner, tält o. s. v. — allt hvad man kan tänka sig höra till ett städadt ungkarlshem i Afrikas urskogar. Mitt ressällskap är kapten Van Haute, som äfven fungerar som assistant på min expedition. Tva hvita män — alltså två hängmattor att resa i, tolf bärare för



Negerdans i byn Godeankoj

hvarje. Arma själar, som få knoga och bära oss i hettan, medan vi halfsofvo under ett parasoll! Men så få de också åtskilliga koppar salt för arbetet. Salt är infödingens mynt. Guld och silfver är intet, men groft salt eller ett stycke tyg är allt. Äfven andra saker ha stort handelsvärde, som krut t. ex. För en bjällra af mässing kan man få en höna.

Kl. 8 bar det, som sagdt, i väg med bärarne. Vi hade planerat en tre timmars dag endast, för att få godt logi i en af de större byarna, och gjorde oss därför ingen brådska. Afskedsbägaren väntade hos bolagets chef på platsen och snart sutto vi bänkade på dennes rymliga veranda. Bolaget har Kasai-distriktet cirka 350 faktorier eller gummiposter, hvar och en under en eller två agenter med en eller två assistenter, allt efter storleken. Luebo är en af de största posterna, bolaget har här två agenter och tre assistenter. Dessförutom finns där en statens militärpost, en katolsk missionsstation samt en amerikansk presbyteriansk mission. Inalles omkring tre hvita, hvilket är ett ansenligt antal i dessa trakter. Vid 10-tiden bröto vi upp och placerade oss i våra hängmattor för att, som det så vackert heter, gå okända öden till mötes!

En reshängmatta är upphängd under en tjock bambustång och man ligger rätt bekvämt i den. En neger i hvar ända på stången, och så bär det af i jämn lunk. De tio reservnegrerna fylkade sig kring hängmattan och med skrik och sång uppmuntrade bärarna. Så snart de två äro trötta, springer ett nytt par fram och aflöser detta.

Åtskilliga byar passerades och dess invånare kommo alltid "man ur huse" för att tillropa oss sitt: "Mois, muka lenge", hvilket betyder: "Långt lif, höfding", och är den allmänna hälsningsfrasen. Alla hvita äro "höfdingar". Barnen i synnerhet äro särdeles kvicka att komma så nära hängmattan som möjligt för att säga sitt "moia". Mestadels äro de nakna, d. v. s. med undantag af de obligatoriska dekorationerna: ett snöre omkring midjan, en ring om vristen eller handleden. En liten knatting på omkring 115 år hade förutom snöret kring midjan äfven den högst värdefulla dekorationen — en liten ringklocka, som dinglade och pinglade på en sådan plats, att den ovillkorligen måste vara i vägen om han ville sätta sig. Vid 1-tiden gjorde vi halt i byn Kalemba. Här liksom i de flesta byar på vägen finnes ett särskildt hus för resande hvita. Huset är en jordhydda af infödingarnes typ med grästak. Det är dock stort och rymligt och man sofver rätt bekvämt där. Genast efter vår ankomst åto vi en välsmakande lunch. På eftermiddagen hälsade vi på hos höfdingen och fingo tillstånd att köpa en get. Utan höfdingens medgifvande kan man inte köpa en nypa tobak från byns invånare. Geten kostade 4 famnar tyg — billigt bomullstyg —, och snart hade kocken — eller rättare kockarne, ty vi hade tyå — slaktat henne, styckat henne och placerat köttet i grytan. Våra tre upppassare ordnade ett smakfullt bord, och jag kunde med glädje konstatera att vår första måltid på vandrarestråten öfverträffat mina djärfvaste förhoppningar. Vi åto under bar himmel och njöto af svalkan, som alltid infinner sig efter solnedgången. Kl. ½9 voro vi i säng och 5 minuter efter sedan ljuset var släckt började rattorna komma fram ur grästaket och nedför väggarna

för at se, hvad slags främmande det var denna gång. Jag vet dock ej hvad resultat deras undersökning ledde till, ty oartigt nog somnade jag så godt som genast.

Följande morgon hade vi en hastig frukost vid 6-tiden, packade ihop de öppnade effekterna och öfverlämnade dem till bärarne samt sutto i hängmattan kl. 127. Dagen lofvade att bli otreftig, ty tunga moln hängde öfver våra hufvuden och åskan mullrade hotfullt. Det dröjde ej länge förrän stora droppar började falla. Vi drogo på regnrockarna och spände upp paraplyerna, under det att de få negrerna, som hade skjortor på sig, togo af dessa och behöllo endast det lilla skynket de bära kring midjan. De



Vid lägret

veta att det är skönt att ha en torr skjorta att ta på, när regnet slutar!

Landet mellan Luebo och bolagets post Tahitadi är ganska högt, men bäckar och mindre floder ha skurit djupa dalar i platan och de äro rätt besvärliga att gå öfver, ty sidorna äro vanligtvis mycket branta. Det är 22 sådana dalar på vår väg och nöjet att klättra utför och uppför de branta sidorna är minimalt — i synnerhet när regnet gör marken slipprig. Vid ½10-tiden bröt tornadon löst med sin fulla kraft och regnet öste ned så som det endast kan i tropikerna. Blixt följde på blixt och åskan skrällde oafbrutet med oerhörd styrka. Lyckligtvis funno vi en liten

by på vägen och voro mycket glada att få krypa in i en smut ig och rökig negerkoja. Icke förrän vid 1-tiden kunde vi fortsätta vår färd och två timmar senare nådde vi den by, i hvilken vi beslutat öfvernatta. Ungefär på detta sätt fortgick vår resa och på elfte dagen ankommo vi till bolagets post i Bakéte, hvarest jag började de undersökningar, för hvilka jag kommit hit till Congo.

I Bakéte förfärdigade jag en stor kanot, 12 m. lång, för undersökningarna å floden. Ett stort träd nedhöggs, urholkades och tillformades på infödingarnes vis. Kanoten har gjort oss ovärderlig nytta. Medelst densamma hafva vi varit i stånd att transportera närmare ett ton af vårt bagage på floden. Den 20 dec. sjösattes kanoten och dagen efter flyttade vi till en liten negerby. Bumba-Bumbo. Här tillbragtes julen, hvilken förflöt som alla andra dagar. Allt eftersom arbetet fortskridit ha vi trängt allt längre söderut längs floden, från by till by. Angenäma afbrott ha ei saknats. Sålunda har jag antecknat från den 3 jan. följande: "Tidigt i morse väckte min uppassare mig med den underrättelsen, att några infödingar upptäckt en sofvande flodhäst i det manshöga gräset på flodstranden. Det tog ej många minuter att få på kläderna, en näfve patroner i fickan, geväret och i väg. Kaptenen kom efter inom en minut med tre gevär och min upppassare, Kantjo, följde för ovanlighetens skull sina instruktioner och kom traskande med fågelbössan. Två infödingar visade vägen. Sedan vi följt flodstranden en stund, stötte vi på en liten bäck, som vi måste öfver. Till min förvåning hoppade en af negrerna ned ibland sjögräset, hvarest vattnet stod honom till knäna, trefvade med händerna ett ögonblick under vattenvtan och lyfte plötsligt upp en kanot ur vattnet, vände upp och ned på den och hade den lilla farkosten flytande på en half minut.

Marschen fortsattes på den andra sidan bäcken. Det var ett nöje at se infödingarne smyga efter flodstranden med ljudlösa steg. Efter några minuters nervspännande marsch stannade plötsligt ledaren och gaf tecken att han fått sikte på djuret. Jag smög mig fram med spänd hane och efter mig kom kaptenen. Vi kommo ej en sekund för tidigt! Besten hade vaknat och gifvi sig ned i vattnet — endast hufvudet syntes ofvan ytan — han var tydligen färdig att hvilken sekund som helst gifva sig af. Samtidigt brakade de båda skotten och så snart röken skingrat sig, såg jag endast kolossala ringsvall, hvarest besten försvunnit. Negrerna, som hafva en underbar synförmåga, hade märkt, att båda skotten träffat i hjässan. Vi sände genast några män i kanoten för att hemföra bytet, men de återvände utan resultat efter

två timmars sökande. Antagligen hade ögonblicklig död inträffat och i så fall kunde vi ej vänta att kroppen skulle dyka upp förrän efter omkring 24 timmar.

De stammar, som bo här nära Lulua-floden, åro ansedda för att vara de vildaste som för närvarande finnas i Congo. Staten har förgäfves sökt civilisera dem, stäfja slafhandeln och människoätandet, som florerar i hög grad, samt indrifva skatter. Åtskilliga hvita ha blifvit dödade och många negersoldater ha stupat här de senaste åren. Att det under sådana förhallanden



Vid statsposten M:a Kapanga

är med risk förenadt att genomtränga dessa trakter, är lätt förstådt. Jag var af guvernören erbjuden eskort, men afsade mig densamma på den grund, att soldaternas uppträdande i dessa trakter alltid föranleda skärmytslingar. Det har också lyckats oss att genomtränga dessa illa beryktade trakter utan allvarliga äfventyr. En liten upplefvelse kanske är värd att omnämnas. Den 25 jan, är antecknad: "——— Efter undersökningarnas afslutande för dagen, beslöto vi anträda återfärden till lägret öfver land, i stället för at följa kanoten. En infödinge visade vägen och två bössbärare utgjorde eskorten. Infödingen marschetade raskt och jag följde honom hack i häl, lämnande ett afst ind af omkring 200 m. mellan mig och kapienen, hvilken följdes af

bössbäraren. Helt oförmodadt stötte vi på en by och mitt ovärtade inträde förorsakade en viss förvirring. Omkring 20 man sprungo upp från sin sittande ställning kring eldarna och fattade sina flintlåsgevär. Jag blef förbluffad öfver detta mottagande och stannade helt plötsligt med handen om revolvern i fickan. Min vägvisare tillropade dem att sänka gevären, och jag började se mig om för att utröna orsaken till deras beteende, och upptäckte, bakom en hydda, en man, bunden till händer och fötter. Så snart jag upptäckt honom sprang byns höfding fram och började lossa fangens band under liftiga och obegripliga förklaringar. Kaptenen anlände i detsamma och med tillhjälp af våra mäns tolkning fingo vi reda på af fången, att han kommit till byn med en massa höns för att köpa en hustru, men invånarne hade tagit hans höns och gjort honom till fånge. Hvad hans öde skulle blifvit, om vi ej ingripit, är ej svårt att säga. Antingen hade han fått fungera som hufvudrätten vid en festmåltid eller också hade han blifvit såld som slaf till någon annan stam. Sådant är förhållandet stammarna emellan. Vi gåfvo bofvarne en skarp tillrättavisning samt lofvade att rapportera saken till närmaste militärpost, togo mannen med oss och aftågade, åttöljda af infödingarnes allt annat än vänliga blickar. Dagen därpå sände vi den f. d. fången till hans by, och hans tacksamhet kan man lätt tänka sig."

Jag vet ej om denna lilla skildring kan hafva något af intresse eller ej. Tyvärr kan jag ej, utan bolagets eller statens medgifvande, yttra mig om resultatet af mina undersökningar eller den tekniska sidan af expeditionen. För att i någon mån komplettera "berättelsen" bringar jag några fotografier, som jag tagit här. — Om två månader är regntiden slut och jag betäknar då befinna mig cirka 200 km, längre söderut. Här vänder jag kosan mot norr och i oktober eller november, kanske förr, hoppas jag nå kusten i och för återresan till Europa. Kanske jag längre fram har saker af större intresse att berätta — i så fall låter jag naturligtvis höra af mig.

Till slut vill jag nämna, att hvarje litet ord eller hälsning från Eder samt öfriga medlemmar af S. I.-F. mottagas med största tacksamhet. Trots det att jag befinner mig så långt från Chicago är jag dock i hög grad intresserad af föreningens och dess medlemmars öden, och jag ber om min hälsning till dem, i hvars minne jag fortfarande existerar. Naturligtvis vill jag fortfarande uppehilla mitt medlemskap. Nyckeln till klubbrummet har jag fortfarande i min ägo och den är nog det enda exemplaret, som funnit sin väg till hjärtat af Afrika.

JUN 2 8 1915

# Constitution and By-Laws

and

# List of Members

for the

Swedish Engineers' Society of Chicago

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ROBERT HVITFELDT

## The Swedish Engineers' Society of Chicago

1915



JOHN ERICSSON

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## CONSTITUTION and BY-LAWS

OF

## The Swedish Engineers' Society of Chicago

#### ARTICLE I.

## Name and Object of the Society.

Section 1. The name of the Society shall be "The Swedish Engineers' Society of Chicago."

Sec. 2. The object of the Society shall be to promote knowledge, advancement and co-operation among the technical men of Swedish descent engaged in engineering and industrial operations in Chicago and vicinity.

#### ARTICLE II.

## Membership.

Section 1. The members shall be divided into five classes: Honorary, Life, Active, Corresponding and Associate.

Sec. 2. Qualifications. To become a member it is required to be of Swedish descent and to meet the requirements as set forth below.

Sec. 3. **Honorary Member** shall be a man of prominence in the sciences or industries or who has made himself deserving of the society's highest regard.

Sec. 4. A Life Member shall be an active or corresponding member of the society who has to the treasury at one time paid the sum of Fifty (50) Dollars. Such life member shall enjoy all privileges of an active member.

Sec. 5. An Active Member shall be one possessing technical education, from some school or college, or shall be one who, through self-tuition and ability, has worked himself up to a position which requires engineering knowledge.

Sec. 6. A Corresponding Member shall be residing at a distance of at least forty (40) miles from the City of Chicago. The requirements shall be the same as for an active member. The transfer of an active member to this group shall be made semi-annually.

Sec. 7. An Associate Member shall be one who cannot qualify as active or corresponding, but who is interested in the Society's activities and who may, by his position in the community, be expected to aid the aims of the Society.

#### ARTICLE III.

## Admissions and Expulsions.

- Section 1. Application for membership shall be made on blank, the form of which is determined by the Board of Directors, and shall contain information on the several points previously enumerated and a declaration that the applicant will abide with the rules and regulations of the Society. The applicant shall refer to at least two members who are acquainted with the applicant and can certify to his desirability as a member.
- Sec. 2. The application must be accompanied by an admission fee of two (2) dollars and shall be submitted to the Secretary, who shall post the name of the candidate and proposers on the bulletin board for at least one week. The Board of Directors shall then decide whether the applicant is acceptable or not, and shall determine to which class he may be referred. If the applicant is not accepted the admission fee shall be refunded.
- Sec. 3. An honorary member shall be proposed in writing, which shall give the reasons for the proposal and shall be signed by at least ten active members in good standing. He shall be elected only by unanimous vote of the entire Board of Directors, after the name of such candidate has been posted in the regular way. The voting to be done by letter ballot if necessary.
- Sec. 4. Membership of any person shall date from the date of his election. A rejected applicant may renew his application for membership at any time after the expiration of one year from the date of the ballot rejecting his previous application.
- Sec. 5. A member of the Society may resign his membership by a written communication to the Secretary, who shall present the same to the Board of Directors, who shall accept his resignation, if all his dues have been paid.
- Sec. 6. Upon a written request of ten or more active members in good standing, giving cause therefore, a member of the Society may be expelled by the Board of Directors, if there appears to be sufficient reason. The accused member shall first be advised of the charges against him and given an opportunity for defense. If expulsion is found justified, the member shall be notified, but unnecessary publicity should be avoided.

#### ARTICLE IV.

#### Dues.

- Section 1. The yearly dues for an active member shall be six (6) dollars. The yearly dues for a corresponding member shall be two (2) dollars if residing in the United States or Canada, and shall be one dollar if residing in other countries. The yearly dues for an associate member residing within forty (40) miles of the City of Chicago shall be four (4) dollars. The yearly dues for an associate member residing forty (40) miles or more from the City of Chicago shall be two (2) dollars. All dues shall be paid in advance. An honorary member shall be exempt from payment of dues.
- Sec. 2. Any person whose dues are more than six months in arrears shall be notified by the Secretary or Treasurer. Should his dues become nine (9) months in arrears, he shall lose his right to vote and to receive the Society's publications, and should his dues become one year in arrears, he shall forfeit his connection with the Society. The Board of Directors, however, may for cause deemed sufficient, extend the time for payment and may relieve any member from paying part or all of his dues when circumstances or the interests of the Society are deemed to justify such action.

#### ARTICLE V.

## Officers.

- Section 1. The officers of the Society shall be as follows: Sec. 2. A president, who shall preside at the meetings and perform the duties pertaining to a presiding officer. He shall also be the chairman ex-officio of any committee he may appoint, and whose meetings he may attend.
- Sec. 3. A vice president, who shall, in the absence of the president, perform all duties required of that officer.
- Sec. 4. A secretary, who shall attend to the official correspondence of the society, receive applications for membership and keep records of the meetings and all official transactions.
- Sec. 5. A Treasurer, who shall, under direction and approval of the Board of Directors, handle all funds of the Society, collect dues and pay bills with check on a Chicago bank and keep books

of all such transactions, enabling the Board of Directors at any time to determine the Society's financial standing. The Treasurer shall be bonded in a surety company at the expense of the Society.

- Sec. 6. The Board of Directors shall consist of the officers and five additional active members elected as stated in Article VI.
- Sec. 7. The President, as chairman of the Board of Directors, shall call meetings of the board whenever deemed desirable, and shall together with the board establish such rules and regulations for the society's headquarters, when such exist, as they deem proper, and shall with the board exercise a general supervision over the society's affairs. At the request of three members of the board of directors an extra meeting may be called.
- Sec. 8. Standing Committees. The incoming President shall, at the annual meeting, appoint a Committee on Lectures, a House Committee and a Library Committee. The Committee on Lectures shall consist of three members, whose duties it shall be to arrange for the reading of papers, to lead discussions and to otherwise contribute in making the meetings interesting. The House Committee shall consist of three members. This committee shall, under supervision of the Board of Directors, have charge of the Society's property, arrange for quarters and entertainments, etc., but must not incur greater expenses to the Society than given by written authority from the Board of Directors. The Library Committee shall consist of three members. This committee shall have supervision over the Society's library, receive books, magazines and pamphlets, shall list same and shall submit to the Board of Directors estimates of expenses desirable to extend and maintain the library.
- Sec. 9. Special Committees and the Appropriation of Money. A proposition to appoint such a committee or to appropriate money shall be presented at a regular meeting of the Society, and, if sustained, the Board of Directors shall take the proposition under advisement and decide whether the object is justified and if the necessary expenses can be met by the Society. In such case, the board will select a committee and give it instructions as to the scope of its work and the amount of money available for the purpose. A two-third majority of the Board shall be required to decide, the votes to be cast by letter ballot if necessary.

#### ARTICLE VI.

#### Nomination and Election of Officers,

Section 1. The President, Vice President, Secretary, Treasurer and the Directors shall be elected from the active or life members, in the month of December annually. The officers shall hold office for one year and the directors two years. Three directors shall be elected in the even years and two in odd years.

The term of office of each officer shall begin at the close of the annual meeting in January for the year for which he was elected, and shall continue for the period above named or until a successor is duly elected. Should any officer or member of the board of directors be unable to serve, such vacancy shall be filled by a life or active member elected by the board of directors.

- Sec. 2. There shall be a Nominating Committee composed of six (6) members of the Society, three of which shall be appointed by the Board of Directors and three of which shall be elected annually when the officers of the Society are elected. This committee shall elect their own chairman. It shall be the duty of this committee to meet in the early part of November of each year and nominate the candidates for officers and directors named in Article V.
- Sec. 3. The three elective members of the nominating committee shall be nominated and elected at the regular December meeting of the Society.
- Sec. 4. The Secretary shall mail, on or before the last Thursday in November of each year, to each member entitled to vote, a ballot containing the names of the nominated candidates for the several offices falling vacant. Under the names of the nominees for each office so printed there shall be provided a space for the use of the voter if he desires to substitute another name. The voter shall enclose said ballot in an envelope and seal the same. He shall then enclose the sealed envelope in a second envelope marked "Ballot," seal the same, and shall then write his name thereon for identification. The ballot thus prepared and enclosed shall be mailed or delivered unopened to the Secretary of the Society. The Secretary or Treasurer shall certify to the competency and signature of all voters. A ballot without the autographic endorsement of the voter written on the outside envelope shall be marked "Defective."

Sec. 5. All ballots shall be transmitted by the Secretary unopened to the presiding officer of the December meeting. The presiding officer shall then declare the election closed and shall appoint three tellers who shall first destroy all the defective ballots unopened. They shall then open and destroy the endorsed outer envelopes marked "Ballot," and then open the inner envelope and count the votes. The opening of both the outer and inner envelopes as well as the counting of the votes shall be done in open meeting after the election is closed. A ballot which contains more names than there are offices to be filled is thereby made "Defective," and shall be rejected by the tellers. The tellers shall certify the results of the voting to the presiding officer, who shall then announce the candidates having the greatest number of votes for their respective offices and declare them elected for the ensuing year. A tie vote shall be decided through revoting by the voters present.

Sec. 6. Questions of vital interest to the policies and existence of the Society, shall be submitted in writing at a regular meeting of the Society, and may be, by a majority vote of the members present at such meeting, ordered to be presented for a special ballot to be cast at the next regular December meeting. This ballot shall briefly state the pro and con of the question. "Yes" or "No" should be voted and the ballot enclosed in the same envelope as that containing the official ballot. A two-third majority of the votes cast shall be necessary to carry the question.

### ARTICLE VII.

## Meetings.

Section 1. The regular meeting of the society shall be held each month at such hour and at such place as may be determined upon. Ten active members in good standing shall constitute a quorum for transaction of ordinary business, with the limitations as stated in Art. V, Sec. 9, but questions of vital importance to the Society shall be submitted to letter ballot as described in Article VI, Section 6.

Extra meetings may be called by the President on his own initiative or if petitioned by at least ten active members in good standing, who shall sign such petition and state the object of the meeting. At such extra meeting only such business shall be transacted as stated in the notice to assemble.

- Sec. 2. The annual meeting shall be the first regular meeting in January.
- Sec. 3. Members have the privilege to invite friends to the meetings.
  - Sec. 4. "Robert's Rules of Order" to govern.

#### ARTICLE VIII.

#### Permanent Funds.

The Commonwealth Edison first mortgage 5% gold bond No. 18095 of one thousands dollars par value and maturing in 1943 shall be held by the Treasurer of the Society, and only the interest thereof shall be used for current expenses. To this permanent fund shall be added the dues for life membership and such sums as the board of directors from time to time may decide to add. This permanent fund shall not be drawn upon unless decided upon in the following manner: The proposition shall be presented in writing at a regular meeting at least three months before the annual election, and may, by a majority vote of the members present at such meeting, be ordered to be presented for a special ballot to be cast at the next regular December meeting. This ballot shall briefly state the pro and con of the proposition. A two-third majority of the votes cast shall be necessary to carry the proposition.

#### ARTICLE IX.

#### Amendments.

Proposed amendments to this constitution must be reduced to writing and signed by at least ten active members in good standing, and shall be submitted to the Board of Directors, who shall have the petition with the names of the petitioners and the proposed amendment printed with the call for a regular meeting of the Society. Should such a meeting by a two-thirds majority vote recommend the amendment as proposed or as amended by the meeting, then the question shall be submitted to a "Special Ballot." Such ballot to contain brief statement of the reasons for the change pro and con. A two-thirds majority of the votes cast shall be necessary to carry the amendment.

Amendments so adopted shall take effect immediately after the next annual meeting in January.

#### ARTICLE X.

## Dissolution of the Society.

- Section 1. Should the number of active members fall below twenty, a proposition may be entertained to disband, but this must be made in writing and addressed to the Board of Directors. An extra meeting shall then be called not earlier than six (6) days after the issuance of such notice, and no other business shall be transacted at such meeting.
- Sec. 2. Should the meeting so held by a two-thirds majority decide on dissolution, then the question shall be submitted to all voting members by letter ballot and a two-thirds vote of all active and life members shall be necessary for the dissolution of the Society.
- Sec. 3. A history of the Society shall then be written, and, together with documents, books, correspondence and the gavel, or other relics and valuables the Society may possess, be deposited with the Swedish Historical Society of America, or, if this Society should not exist at the time of the dissolution or not be able to take care of the property turned over, then the Swedish Societies' Old People's Home Association of Cook County, Illinois, should be requested to take into safe-keeping all the belongings until another Swedish Engineers' Society may be formed in the City of Chicago.
- Sec. 4. Should any funds belonging to the Society be in existence at the time of dissolution, such funds and money shall be turned over to the party taking custody of the Society's property as a compensation for services to be rendered.

#### ARTICLE XII.

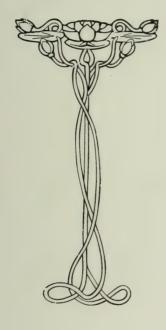
## Order of Business.

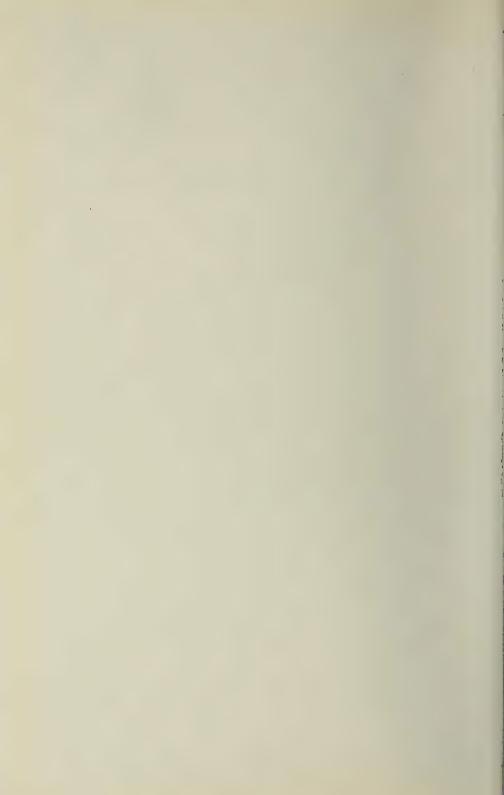
The order of business shall be as follows:

- 1. Call to order by the president.
- 2. Reading of the minutes.
- 3. Report of board of directors.
- 4. Reports of standing and special committees.
- 5. Unfinished business.
- 6. New business.
- 7. Reading of papers and discussion of same.
- 8. Election of officers (at the December meeting).
- 9. Adjournment.



# List of Members







ALBIN P. RISSLER
President of The Swedish Engineers' Society of Chicago 1915



Still Siegeneraus.

LILJENCRANTZ, G. A. M.

Charter Member, Honorary Member.

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Albarton

#### CARLSON, DR. ANTON JULIUS

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#### ADLER, NILS

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#### AHNGER, CHARLES

Corresponding Member.

Finland.



#### AKERLIND, G. A.

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#### AKERLIND J. AD.

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#### AKERS, AXEL

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Corresponding Member.

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## AUSTROM, C. A.

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## BJURSTROM, K. GUSTAF A.

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### BJÖRKSTEDT, WILLIAM

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### HILLBERG, A. G.

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### HOLMBERG, THORSTEN C.

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## HOLMEN, A. R.

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## HOLMES, SVEN

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## HOLTMAN, DUDLEY F.

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### JOHNSON, SIXTEN

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#### MEMBERS

 $^{
m OF}$ 

THE SWEDISH ENGINEERS' SOCIETY OF CHICAGO APRIL 1, 1915.

Honorary	2
Life	6
Active	159
Corresponding in U. S. and Canada	63
Corresponding in Europe	41
Associate	5
_	
Total	276



## Årsberättelse

af Svenska Ingeniörs-Föreningen i Chicago verksamhet under året 1914.

I likhet med föregående år torde härmed ånyo gifvas en kortare historik öfver Svenska Ingeniörsföreningens i Chicago tillväxt sedan dess uppkomst, och med några få hufvudpunkter belysa dess framåtskridande i synnerhet för de medlemmar, som under det gångna året intagits i föreningen.

Föreningens grundläggande ägde rum å mötet den 10 Oktober 1908, hvarvid följande tjänstemän valdes äfven att innehafva respektive ämbeten under året 1909. Till president, Henry Nyberg; till vice president, A. P. Rissler; till sekreterare, G. A. Åkerlind, och till kassör, Fred Seaberg. Den första medlemsboken utkom 1909 med 74 medlemmar.

För året 1910 valdes till president, Gustaf A. M. Liljencrantz; till vice president, A. P. Rissler; till sekreterare, G. A. Åkerlind, och till kassör, Carl Westerlind. Medlemsboken för det året räknade 120 medlemmar.

För året 1911 valdes till president, Dr. Ernst J. Berg; till vice president, C. G. Axell; till sekreterare, G. A. Åkerlind, och till kassör, Gustaf K. G. Bjurström. Katalogen för det året räknade 179 medlemmar.

För året 1912 valdes till president, John Ericson; till vice president, Robert C. Östergren; till sekreterare, G. A. Åkerlind; och till kassör, Algot A. Wickland. Katalogen för det året räknade 209 medlemmar.

För året 1913 valdes till president, Henry Ericsson; till vice president, F. W. Iggberg; till sekreterare, G. A. Åkerlind, och till kassör, C. A. Bolin. Katalogen för det året räknade 254 medlemmar.

För året 1914 valdes till president, John Ericson; till vice president, C. E. Carson; till sekreterare, G. A. Åkerlind; och till kassör, C. A. Bolin. På grund af herr Åkerlinds frånvaro från staden blef C. G. Axell tillsatt som sekreterare. Katalogen räknade 265 medlemmar.

Under årets lopp hafva intagits såsom medlemmar ett antal af 40 personer, af hvilka 10 äro inbegripna i medlemsboken för 1914. De återstående 30 medlemmarne hafva ingått i föreningen sedan den 1 April 1914, då medlemsboken trycktes, och af dessa

äro 20 aktiva, 7 korresponderande i Förenta Staterna och 3 korresponderande i Sverige. En medlem har aflidit, tre resignerat och 8 utstrykits från föreningen på grund af obetalda årsafgifter. Föreningens medlemskap utgör således för närvarande 283 parsoner eller en nettotillökning af 32 medlemmar sedan den 1 Januari 1914.

Medlemskatalogen med årsboken inberäknad har under årets lopp tillsändts Svenska Legationen i Washington och öfriga svenska konsulat i Förenta Staterna. Äfvenså bibliotek i Sverige och Amerika, tekniska skolor och föreningar i hemlandet, Svenska Ingeniörsföreningen i Amerika jämte svenska pressen härstädes hafva erhållit föreningens trycksaker.

Föreningens finanser äro för närvarande i ett tillfredsställande skick. Rapporten från kassören, som närmare redogör för de finansiella detaljerna, visar att inkomsterna för året 1914 varit \$1,038.80 och utgifterna belöpt sig till \$998.87. Föreningens totala tillgångar uppgingo vid föregående årets slut till \$1,562.28.

I biblioteks-kommitténs rapport redogöres närmare hvilka tidskrifter hafva subskriberats på, och hvilka föreningar, svenskamerikanska tidningar och amerikanska tidskrifter hafva donerat sina publikationer till föreningen.

I enlighet med föregående år har föreningen haft sina ordinarie möten hvarje månad med undantag af sommarmånaderna, hvarvid flera intressanta och lärorika föredrag hållits. Behofvet af ett stereoptikon för dessa möten har alltmer gjort sig gällande och på Föredrags-kommitténs föranstaltande uppköptes för föreningens räkning en sådan maskin, som närmare redogöres för i ofvannämnda kommittés rapport.

Föreningens ordinarie och öfriga sociala möten hafva uteslutande hållits på endera af de två förnämsta svenska klubbarna i Chicago, hvarest medlemmarne åtnjutit de bästa svenska sexor som kan åstadkommas för det billiga priset af en dollar per person. Anordningarne för dessa möten, såväl som för de utflykter som företagits under sommarmånaderna, hafva bestyrts af Huskommittén, som närmare redogör för arbetet i dess rapport.

Kongress-kommittén, som tillsattes vid föregående års årsmöte för att vidtaga nödvändiga anordningar för Svenska Ingeniörs-kongressen som kommer att hållas i Chicago under September 1915, har haft flera möten under årets lopp, och hänvisas dess arbete till kommitténs rapport.

Under föregående sommar hafva Ingeniörsföreningens medlemmar blifvit anmodade att rösta för antagandet och uppgörandet af ett emblem, i form af en knapp eller dylikt, att bäras såsom föreningens igenkänningstecken. Detta förslag gick ej igenom på grund af det lilla intresse som visats för saken i fråga och på grund af likställiga jakande och nekande röster.

För att underlätta sekreterarens många skrifgöromål och för att behandla dessa på ett mera affärsmessigt sätt har för föreningens räkning inköpts en skrifmaskin för ett pris af \$35.00.

Det förtroende och den aktning, som denna förening lyckats tillvinna sig och som utan tvifvel kommer att göra den mera bemärkt och betydande med anledning af Svenska Ingeniörskongressen i år, torde genom osjälfvisk offervillighet och entusiastiskt samarbete göra den Svenska Ingeniörsföreningen af Chicago en nyttig och permanent förening samt alltmer fylla sitt högsta ändamål att utgöra ett starkt föreningsband mellan alla svenskar, arbetande i ingeniörsvetenskapen eller industrien i Chicago med omgifningar.

Föreningen står äfven i tacksamhetsskuld till den svenskamerikanska pressen, som alltid varit beredvillig att gifva den sitt värdefulla bistånd i dess sträfvande, och hoppas vi att föreningen allt fortfarande får komma i åtnjutande däraf.

Sekreteraren ber att få uttrycka sin personliga erkänsla och tacksamhet till de afgående tjänstemännen och kommittémedlemmarne för det oegennyttiga och samvetsgranna samarbete i och för skötseln af föreningens angelägenheter, äfvenså till de många vänner och medlemmar i allmänhet, som i väsentlig grad bidragit att underlätta arbetet för föreningens framåtskridande och utveckling, och vill jag hoppas att det arbete, som nedlagts på föreningsverksamheten, varit i den rätta riktningen och så samvetsgrann, som omständigheterna kunnat medgifva.

Chicago den 16 Januari 1915.

C. G. AXELL, Secretary, 1914.

## Treasurer's Report for 1914.

To the Swedish Engineers' Society of Chicago.

Gentlemen—The following shows the receipts and disbursements of money and the financial standing of the Society for the year ending December 31, 1914.

RECEIPTS.	
Cash Balance from year 1913\$	1,522.35
Money received during 1914	1,038.80
Total\$	2,561.15
DISBURSEMENTS.	
	000.07
Expenses for year 1914\$	. 998.87
Assets on hand Dec. 31, 1914, as follows:	1 005 00
	1,035.00
"Permanent Fund" in Savings Bank	150.75
Cash on hand	376.53
	2 561 15
The following is an itemized account of money receiv	
	rea and
expended during 1914:	
ITEMIZED RECEIPTS.	
Admission Fees from new members\$	78.00
Dues from Active members	752.75
Dues from Corresponding members	107.00
Dues from Associate members	14.00
Interest on Commonwealth Edison Co. Bond	50.00
Photo Engravings for 1914 Membership Book	16.75
Keys for the Office of the Society	10.00
From the 1913 House Committee	7.95
Donation	
Interest on "Permanent Fund" in Savings Bank	
Miscellaneous	.60
Total\$1	.,038.80
ITEMIZED EXPENSES.	
Office Rent in City Hall Square Building\$	375.00
Electric Light	5.04
Telephone*	32.11
Dues to Swedish Historical Society	2.00
State Bank of Chicago, collection charges	.85
Miscellaneous	2.00
Printing of 1914 Membership Book and Year Book	218.00
Photo Engravings for 1914 Membership Book	27.00
Lecture Committee—Stereopticon and Accessories	46.65
House Committee	9.06

Library Committee—	
Subscriptions	
Picture Album 10.00	
Miscellaneous	
	36.25
Convention Committee—	
Stationery and Supplies\$24.74	
Postage 16.90	
Miscellaneous 6.15	
	47.79
Secretary's expenses for the year have been as follows	8:
Notices and announcements of meetings\$49.60	
Postage 34.74	
Stationery and office supplies	
Typewriter 35.00	
Miscellaneous 3.92	155.10
	157.12
Treasurer's expenses for the year have been as follo	ws:
Bonding in the American Surety Co\$ 5.00	
Safety Deposit Box	
Stationery and Supplies	
Postage	
Miscellaneous 6.35	40.00
	40.00
Total	.\$998.87
ASSETS.	
Commonwealth Edison Co. Bond\$	1,035.00
"Permanent Fund" in Savings Bank	150.75
Cash on hand	376.53
<del>-</del>	
Balance December 31, 1914\$	
Balance December 31, 1913 was	1,522.35
Cain for the year 1014	φ30 03
Gain for the year 1914  Outstanding dues Dec. 31, 1914, from 88 members	
Respectfully submitted,	4000.00
C. A. BOLIN, Treasur	con
C. A. BOLLIN, Treasur	CI.

## Auditing Committee's Report.

Chicago, Ill., January 16th, 1915.

The Swedish Engineers' Society of Chicago, Chicago, Ill.

Gentlemen—The undersigned having been appointed a committee to audit the treasurer's books for 1914, find them to be correct and the Society's finances as follows:

#### RECEIPTS:

Jan. 1, 1914	
-	\$2,561.15

#### EXPENDITURES:

Total expenditures during 1914	
<del></del>	

The balance on hand	consists of one Commonwealth
Edison Bond No.	18,095\$1,035.00
Cash in two banks an	d in treasurer's hands 527.28

\$1,562.28

Estimate of outstanding dues Dec. 31, 1914...... \$ 339.50

We take pleasure in recommending that the Society accept with a vote of thanks, the faithful services rendered by its Treasurer, Mr. C. A. Bolin.

Respectfully submitted,

JOHN H. SCHOTT, RAGNAR CEDERBLOM, E. E. BIRKLAND.

## Report of the Lecture Committee for Year 1914.

The lecture committee, consisting of Mr. A. Rissler, Mr. V. Nicholson, Mr. V. R. Velander, has arranged for the following lectures and excursions during 1914.

February Meeting—"Pure Water and its Relation to Public Health," by Mr. S. S. Saner, past deputy commissioner of public works of Evanston.

April Meeting—"Asphalt and Road Construction," by Mr. W. H. Flood, consulting engineer.

May Meeting—"Operation of Chicago Water Works," by Mr. John E. Ericson, city engineer.

October Meeting—"Design and Construction of Aerial Flying Machines," by Chas. Hedelin, M. E.

November Meeting—"Open Hearth Steel and its Manufacturing," by John Brunner, C. E.

The lectures have been illustrated by stereopticon views and all have been very interesting and instructive, and we take this opportunity to express our appreciation for the thoroughness with which the lecturers have prepared their papers.

In June a trip was made to the Fisk Street Power Plant of the Commonwealth Edison Company, where Mr. C. G. Axell in detail explained the various devises and arrangements.

In August, Mr. John Ericson, City Engineer, arranged for a trip to the Three Mile Crib, Lake View Crib and the Recreation Pier. Various questions asked about points of interest were answered and throughout the trip an enjoyable time was had.

Through an appropriation voted by the board of directors a much needed stereopticon with accessories was bought for \$46.65, which has proven itself of very great value.

Respectfully submitted,

A. RISSLER, Chairman Lecture Committee.

## CHICAGO WATER WORKS.

An abstract of a Paper, by MR. JOHN ERICSON, City Engineer, at the May meeting of the Society.

In 1836 Chicago got its first water works, which was built by a private company, the Chicago Hydraulic Company. Though the population at this time was less than 1000 persons, the water supply was far from satisfactory, so in 1840 the company installed a 25-H. P. pumping engine, drawing its supply through an iron pipe extending about 160 feet out into the lake, and discharged through about 2 miles of logs with holes bored thru the center. This condition lasted until 1851, at which time the city got the power to establish its own waterworks. It then took over the franchise of the Chicago Hydraulic Company. A new pumping

engine with the capacity of 800,000 gallons per day was installed at Chicago Avenue and the lake. A 30-inch pipe extended 600 feet into the lake and served as an intake, the outer end of which was protected by a submerged crib. Three reservoirs were built in connection with the system, into which the water was pumped and from these the water was distributed through the mains by gravity. In 1858 it was found necessary to provide additional water and a 13,000,000 gallon pump was installed and two more reservoirs with a capacity of 500,000 gallons were erected. In 1863 Chicago had through annexation of the nearby towns grown to a city of 150,000 inhabitants. Its territory covered about 25 square miles, 120 miles of mains distributed the water furnished by the two pumping engines, whose combined capacity was 21.000,000 gallons per day, or sufficient for a per capita consumption of 43 gallons. The pumping plant was now evidently large enough for sometime to come, but the quality of the water bad gradually become poorer and poorer as the population and commerce had increased. The intakes for the water were relatively close to shore and the sewers emptying part direct into the lake and part into the river polluted the water to such a degree that the problem of securing for Chicago a pure water supply was a serious one even then. As early as 1863 we find a proposition to install a system of intercepting sewers to prevent the pollution of the water supply and also a scheme of reversing the flow of the Chicago River to prevent it from polluting the lake. Neither of these schemes, however, was adopted. A remedy temporarily found in 1867 whem Mr. S. Chesbough, the city engineer at the time, had the pleasure of seeing this new lake tunnel inaugurated. This tunnel, which was 5 feet inside and built of brick, extended to a point 2 miles off the shore, where it terminated in a vertical shaft resting on the bottom of the lake.

The intake is the Chicago Ave. crib, and both crib and tunnel are still in service. This step was naturally in the right direction to receive a pure water supply; but the sewerage still flowed in to the lake very often reaching the intake crib. To prevent the contamination of the drinking water from this source, it was decided to deepen the Illinois and Michigan Canal so as to cause the flow of the Chicago River to go towards the Desplaines River instead of towards the lake. As this scheme was only a partial success, it was decided to install pumps at Bridgeport to increase the flow, and these pumps were in use up to the time that the Drainage Canal was opened. But as the city's growth increased

it was inpossible to produce any pressure in the waterpipes in that part of the city laying furthest from the pumping station, and it was decided to build a new pumping station at 22nd St. and Ashland Ave., taking water thru an 8-ft. tunnel. This station contained two engines, each of 15,000,000 gallons capacity, and was finished in 1876. About this time a 36,000,000 gallons pumping engine was installed at the new Chicago Ave. station.

After a few additional pumping engines had been added to these stations, the maximum capacity of the intake tunnels had been reached and a new tunnel, terminating at the 4-mile crib at 12th street, was accordingly finished in 1891. This new tunnel supplied water for the Harrison and the Desplaines Sts. pumping stations with two pumps of 15,000,000 gallons capacity, and for the 12th St. pumping station which contains three 15,000,000 gallon and one 30,000,000 gallon pumps. It was soon found necessary to further increase the water supply, and in 1901 the stations at Central Park Ave. and at Springfield Ave. were completed, both of which were designed for an ultimate capacity of 100,000,000 gallons, drawing this supply from the Carter Harrison Crib.

This far the needs of the South side had not been considered, so in 1907 a new station at Roseland was begun. It was completed in 1911, and had an initial capacity of 50,000,000 gallons. The new 68th St. Crib and tunnel which connects with this station has a capacity large enough to allow a large pumping station in the southern part of the city in addition to reenforcing the 63rd St. pumping station.

## ASPHALT AND ROAD CONSTRUCTION.

Abstract of Paper read before the Swedish Engineers' Society of Chicago April 18, 1914, by MR. W. H. FLOOD, Chemical Engineer.

Asphalt as a material for road construction has been in use for many ages, but it is only in comparatively recent years that it has reached its present high state of development.

The different types of asphalt may be classified as follow:

1. Solid natural deposits:—Trinidad, Bermudas, Cuban Maracaibo, etc.

- 2. Oil asphalts produced by the distillation of California, Texas, and Mexican petroleum, which are heavily asphaltic in character.
- 3. Blown oil products made by blowing air through heavy Kansas and Illinois petroleums. The air has a thickening effect and results in a substance resembling the true asphalts in many ways.

These various classes naturally have different characteristics and require different methods of handling. The principal purpose of the asphalt in the pavements is a binder to hold together the particles of mineral aggregate which constitutes 85 to 95 per cent of the finished pavement. The asphalt is not intended to bear the weight of the traffic, which is the function of the mineral portion. However, it is obvious that the bitumen is subjected to severe shock and therefore in addition to being adhesive it is important that the asphalt should possess other properties, such as ductility, proper degree of hardness, malleability, relative non-susceptibility to changes of temperature, etc.

Of equal importance to the asphalt is the selection of the sand for sheet asphalt construction, and the sand and stone for asphaltic concrete. It is essential that these materials be not only of good quality but carefully graded, having definite proposition of the various sized portions present, so as to produce a maximum degree of stability. It is also necessary to add a small amount of Portland cement or limestone dust to fill the voids in the smaller particles of sand and thus produce a denser mixture and one which will be waterproof after the addition of the asphalt,

A permanent asphalt pavement, which is one of the most satisfactory types in use today, can not be produced on hit or miss principles, but only by careful and experienced selection and handling of materials, and constant supervision of the mixing process.

# A SHORT DESCRIPTION OF THE LAKE VIEW AND CARTER HARRISON CRIBS

Visited during the outing of the Society, at the August meeting, by MR. JOHN ERICSON, City Engineer.

#### LAKE VIEW CRIB.

Location: East on line with Montrose Ave.

Distance from shore: Approximately 10,000 feet.

Depth of water at Crib: About 26 feet.

Size and shape of Cribs: 72 ft. 6 in. diameter. A regular 12-sided figure.

Size and shape of well: 21 ft. 6 in. diameter. A regular 6-sided figure.

Kind of construction: Timber grillage from bottom —26 ft. to +8 ft. above datum, grillage filled with stone. During 1900 a new super-structure was built from —3 ft. up. This super-structure was built on the old foundation from a point 3 ft. below datum or lake level. Cement bags filled with concrete were placed over old work tied in with rods, etc., to a point 1 ft. below datum, where stone work for superstructure begins. The new superstructure is of steel, stone and brick construction, containing light towers, living rooms, etc., as at the other cribs. Top of parapet wall +21.0 ft.

Ports in Cribs: There are 4 ports through crib structure, 4 ft. x 4 ft. 6 in, wide, built in timber near bottom of well.

The elevation of bottom of port is about 22 ft. below datum or surface of lake.

Ports or gates in intake shaft: There are three ports through cylinder, 4 ft. x 4 ft. in size, 22 feet below lake surface.

Intake shafts: One 10 ft. diameter circular shaft extending down to the intake tunnel, the bottom of which is —63.3 ft. below lake level.

Tunnels: There is one 6 ft. diameter circular tunnel leading to pumping station from crib about 60 ft. below datum.

Breakwater: There is a breakwater around crib containing 6 ports  $2\frac{1}{2}$  ft. wide full depth of water.

Rated capacity: Velocity per second, in 24 hours— 5 ft., 91.608,000 gallons; 4 ft., 73,286,000 gallons; 3 ft., 54,965,000 gallons; 2 ft., 36,643,000 gallons.

When built and cost: The outer crib was completed and water turned on in July, 1896. The superstructure was torn down and rebuilt in 1900.

Cost (Appraisers Report) Permanent substructure and temporary superstructure, \$91,056.56; permanent superstructure, \$75,087.78; equipment and fixtures, \$1,058.65. Total cost. \$167,202.99.

Water—The water at this crib is fine and pure.

#### CARTER HARRISON CRIB.

Location: East on line with North avenue.

Distance from shore. About 14,000 ft. Direction, North 65 deg., 59 ft. 26.5 in. from the Oak st. shaft. Shaft to crib 14,033 ft.

Depth of water at crib: Approximately 34 ft.

Size and shape of crib: Circular, 112 ft., outside diameter. Parapet wall has an elevation of 27.34 ft. above datum. Basement floor, 13.05 ft. above datum.

Size and shape of well: Circular, 60 ft. 4 in. in diameter and contains 27.84 feet of water. The floor of this well being at —27.84.

Kind of construction: The lower part or bottom on crib is composed of 20 feet of solid timbers, grillage resting on the clay bottom of lake. Above the grillage is a steel shell filled with concrete. The outside shell runs from timber grillage to granite courses that forms outside wall of crib to a point about 9 ft. above datum. The top of parapet wall is +28.34 feet. The inside shell runs up to a point +13.05 or level of basement floor, and forms sides of intake well. The outside granite wall is composed of 9 courses. The crib contains large well room roofed in with living rooms for operating force, light tower, lamp, engine storage and other rooms necessary for supplies and other conveniences required on crib. All of brick, steel and concrete construction. (12-inch by 12-inch hemlock used in crib bottom.)

From appraisers report: Built 1900; cost, \$232,738.10. This includes equipment valued at \$5,760.43.

Ports in crib: There are six ports through crib to well, each 5 ft. 6 in. x 5 ft. 7½ in., bottom of ports —26.5. These ports are built in the timber grillage, rectangular in form.

Ports in shafts: Three ports, size 6 ft. x 4 ft. 6 in., bottom of ports about 20 feet below datum. Three fish screens over port, 7 ft. 4 in. x 5 ft. 1½ in.

Intake shafts: There are two shafts, one in use the other dead, similar in construction. Live shaft 11 ft. 8 in. diameter (circular), top of steel shell +8.96 ft., bottom of steel shell 16 ft. below bottom of lake or —53.00, below shell shaft is 11 ft. diameter made with brick lining. The bottom of sump is —99.00, center of tunnel drift is at —88.50 ft. below datum.

Tunnels: One 10 ft. diameter circular. Top of inside diameter is —83.5 feet below datum. This tunnel runs practically level at a center elevation of —88.5 and about 566 degrees

west from live shaft 14.033 to the lake shore at the foot of Oak street. The dead shaft is connected with a 10 ft. circular tunnel stub, 88 ft. long at —87.5 ft. elevation to center of stub.

Rated capacity: Velocity of flow in tunnel, in gallons per 24 hours—4 ft. per second, 203,575,000; 3 ft. per second, 152,682,000; 2 ft. per second, 101,728,000.

When built and cost: Begun July 1896, completed Dec. 1899. Approximately cost, \$235,000.00.

#### OPEN HEARTH STEEL MANUFACTURING.

Abstract of Paper read before the Swedish Engineers' Society of Chicago, November, 1914, by MR. JOHN BRUNNER.

In his paper Mr. Brunner described the following principal stages in the manufacturing of steel.

First—The assembling of raw materials required in the steel making.

Second—The conversion of coal into coke, gas and other by-products in the coke plant.

Third—The reduction of the iron ore into pig iron in the blast furnaces.

Fourth—The conversion of the pig iron into steel in the Open Hearth furnace.

Fifth—The rolling of the steel into rails, structural shapes, plates, bars and other commercial products in the rolling mill.

The Gary Plant of the Illinois Steel Company was used to illustrate the latest development in Open Hearth steel manufacturing. Its equipment and processes were described more or less in detail in the following order:

First—The harbor and the ore and limestone docks.

Second—The unloading and handling equipment.

Third—The by-product coke oven plant.

Fourth—The blast furnaces and the reduction of the iron ore into pig iron.

Fifth—The distribution and use of the blast furnace gas for heat and power.

Sixth—The Open Hearth furnaces.

Seventh—The conversion of pig iron into Open Hearth steel.

Eighth—The rolling mill soaking pits.

Ninth—The rail mill and the rail manufacturing.

Tenth—The blooming and billet mills.

Eleventh—The slabbing and plate mills.

Twelfth—The merchant mills.

Thirteenth—The axle plant.

Fourteenth—The tonnage capacity of the different mills.

Fifteenth—The power plant and power distribution.

The equipment and processes were illustrated by lantern slides. After the paper was finished a general description of some of the characteristics of various grades of carbon and alloy steels, together with the effect of heat treatment, was given from notes. This talk was illustrated by lantern slides showing the grain structure, as seen under the microscope, of steel of various compositions and heat treatment.

#### REPORT OF THE LIBRARY COMMITTEE.

The library committee has during the year added by subscription two more valuable papers, "The Engineering Magazine" and "The World's Work," to the library, which already contained a large number of books and technical papers both by subscription and donations. Among the subscriptions may be mentioned: Engineering Record, Engineering News, American Machinist, Power, Electrical World, and for the coming year the newspaper Svenska Dagbladet of Stockholm, Among the donations may be mentioned: Railway Review, The Foundry, Engineering and Contracting, publications from the University of Illinois Bureau of Mines, and The Bureau of Standards from Washington, D. C., Jernkontorets Annaler, Teknisk Tidskrift, Industritidningen Norden, Svensk Export, Tegel, Svensk Filatelitisk Tidskrift, several Swedish-American newspapers, of which especially may be mentioned Svenka Amerikanaren Hemlandet, Svenska Posten, California Veckoblad, Svenska Amerikanska Posten, and for the coming year through the efforts of this committee, Strix and Söndags-Nisse, of Stockholm have also been added by donation to the papers of this Society.

The committee wishes to extend its thanks to the officers and members, and especially to the retiring secretary, for their kind co-operation during the past year.

CHARLES ENGWALL, Chairman.

#### REPORT OF THE HOUSE COMMITTEE.

The Committee started its activities with the Society's regular meeting February 28th. The meeting was held at Svenska Klubben. 37 members present.

In place of the regular meeting a Ladies' Night was held at Svenska Klubben, March 28th. 87 persons attended this affair.

April 28th the regular meeting was held at Svithiod Singing Club. 41 members present.

May 16th the regular meeting was held at Svithiod Singing Club. 52 members present.

June 20th the Society inspected the Fisk Street Power Station of the Chicago Edison Co.

Fifty members and their friends took advantage of this trip.

July 26th the Society held its picnic at Riverside Park. About 50 members and friends present.

August 22nd, through the courtesy of the Society's President, City Engineer John Ericson, the Society made a trip to the various Water Works Intake Cribs. 40 members and friends present.

September 26th the Society's Family Crawfish Party and Dance took place at the Svithiod Singing Club. 93 ladies and gentlemen were present.

October 17th regular meeting was held at Svithiod Singing Club. 33 members present.

November 28th the regular meeting was held at Svenska Klubben. 55 members present.

December 19th the Society's annual election was held at the Svithiod Singing Club. 27 members present.

January 16, 1915, the Society's annual meeting was held at the Svithiod Singing Club. 77 members present.

The house committee has during the year paid hall rent for the regular meetings and taken care of other incidentals, and have had the pleasure to turn over to the Society's treasurer the sum of \$21.66, surplus of income over that of outlay.

F. SEABERG, Chairman,CLARENCE ONGMAN,C. M. HEDMAN.

## RAPPORT AF VÄSTRA ORGANISATIONSKOMMITTEEN FÖR SVENSKA INGENIÖRSKONGRESSEN I FÖRENTA STATERNA 1915.

Till Svenska Ingeniörsföreningen af Chicago:

I början af Augusti 1913 emottog styrelsen för Svenska Ingeniörsföreningen af Chicago en skrifvelse från Svenska Ingeniörsföreningen i Förenta Staterna jämte meddelande från Svenska Teknologföreningens styrelse huruvida det ej skulle kunna vara skäl att dels stärka samhörighetskänslan mellan den stora mängden af svenska ingeniörer och industriella män i Förenta Staterna och deras i hemlandet verksamma yrkesbröder och f. d. kamrater samt dels att åstadkomma en närmare sammanslutning mellan i Amerika bosatta svenska ingeniörer genom att anordna en svensk ingeniörskongress i Amerika 1915, då helt säkert ett stort antal svenska ingeniörer komma att besöka Förenta Staterna med anledning af världsutställningen i San Francisco och den i sammanhang därmed planerade stora Internationella Ingeniörskongressen, som kommer att hållas under veckan den 20—25 September 1915.

Styrelsen för Svenska Ingeniörsföreningen af Chicago samtyckte till att ett sådant möte vore önskvärdt och på årsmötet i Januari 1914 utnämndes en kommitté af 19 medlemmar med ingeniör John Brunner som ordförande och ingeniör C. G. Axell som sekreterare för att tillsammans med en liknande kommitté förut tillsatt af Svenska Ingeniörsföreningen i Förenta Staterna och utom föreningarna stående ingeniörer vidtaga de nödvändiga organisationsarbetena.

Inom de Västra och Östra organisationskommittéerna hafva sedermera utsetts en centralkommitté med ingeniör C. J. Mellin i Schenectady, N. Y., som ordförande och byggnadskommissarien Henry Ericsson i Chicago som vice ordförande, för att närmare bestämma om anordningarne för kongressen.

Från svensk sida har af Svenska Teknologföreningens styrelse för kongressens förberedande utsetts dels en organisationskommitté med ingeniör Lübeck som ordförande och dels en hederskommitté med finansminister Wennersten som ordförande och omfattande ett sextio-tal af landets mest framstående män inom industriens och ingeniörsvetenskapens område, hvilka på grund af deras ställning inom rikets administration kunna i särdeles stor grad medverka till att stödja det planerade mötets syftemål.

Det har vidare bestämts att den Svenska Ingeniörskongressen i Förenta Staterna kommer att hållas i Chicago och Svenska Teknologföreningens kommitté, hvars åsikt angående den tid för mötet som vore mest lämplig för de svenska gästerna, varit helt bestämmande, var synnerligen nöjd med att Chicago utsetts till mötesplats och har satt tiden till tre eller fyra dagar under veckan den 5—12 September 1915, dessa dagar att närmare bestämmas senare.

Den svenska kommittén har utlofvat ett eller två föredrag med ljusbilder, eventuellt biografbilder, rörande Sveriges tekniska och industriella förhållanden, jämte förutsättningarne för dess framtida utveckling på ingeniörsteknikens område.

Intresset för kongressen lär vara ovanligt stor i Sverige och det ställes i utsikt att minst ett 60-tal svenska ingeniörer kunna hitväntas såsom deltagare i mötet. Svenska regeringen har anslagit 50,000 kronor till stipendier åt mgeniörer och många svenska bolag väntas hitsända framstående representanter för svensk industri, bland annat med hänsyn till de goda förbindelser med svensk-amerikanska ingeniörer, som säkerligen kunna anknytas och hvarigenom äfven studier af motsvarande amerikanska företag torde kunna väsentligt underlättas.

Under sommaren 1914 har den Västra Organisationskommittén utsändt omkring 500 cirkulär jämte blanketter af namnlistor till svenska ingeniörer och industriella män i de västra staterna för att intressera så många som möjligt i mötet. Utbyten af namn på personer tillhörande de västra och östra organisationsområdena hafva gjorts och det antal namn som denna kommitté har i sitt kortregister utgör för närvarande 450. Af dessa hafva ett 70-tal tillkännagifvit sin afsikt att deltaga i kongressen. Inom närmaste framtiden kommer ett andra cirkulär att utsändas och är det då att vänta att ett större antal medlemmar skola inregistreras. I sammanhang med detta må nämnas, att den Östra organisationskommittén har utsändt tvenne upplagor af cirkulär och som resultat erhållit öfver 140 medlemmar såsom deltagare i mötet.

Afgiften för deltagandet i mötet kommer att blifva fem dollars, som torde erläggas af alla, som tillkännagifva sin afsikt att deltaga och som önska blifva underrättade om de anordningar, som göras i och för kongressen. Denna afgift är också ämnad att täcka tryckningskostnaderna af en katalog öfver anmälda deltagare.

Det skulle ju kunna befaras, att det pågående kriget i Europa skulle hafva ett motverkande inflytande på mötet, men så till vida har ingen anledning till farhågor i detta afseende gifvits.

I ett upprop till svenska ingeniörer, som utan tvifvel är af stort intresse för alla svensk-amerikaner. skrifver Svenska Teknologföreningens ordförande, ingeniör Lübeck, följande:

"Om den direkta nyttan af en kongress af förevarande art kan man som vanligt framställa tvifvelsmål. Men med tanke på den indirekta nyttan af ökade förbindelser med den stora mängden af svenska ingeniörer i Amerika får kongressens betydelse icke underskattas. Dessa våra landsmän hafva sedan årtionden i alldeles särskild grad bidragit till att göra det svenska namnet hedrat därute. Ur svensk synpunkt bör kongressen, den första i sitt slag, hälsas med tillfredsställelse, därför att den skall knyta banden fastare mellan de svenska ingeniörerna i Amerika inbördes samt mellan dessa och oss. Kongressen bör därmed också kunna blifva inledningen till ett rikt utbyte af impulser och erfarenheter i framtiden, till gagn för hemlandet, dess ingeniörsutbildning och dess industri, i hvilket afseende Svenska Teknologföreningen har en synnerligen viktig uppgift att vårda. Och om härigenom skulle skärpas känslan af vårt eget ansvar för att landsmännen i utlandet i alltjämt växande omfattning må finna trefnad och utkomst inom Sveriges gränser, så skulle den första svenskamerikanska ingeniörskongressen fylla en uppgift af än större betydelse."

Å Västra Organisationskommitténs för Svenska Ingeniörskongressen i Förenta Staterna 1915 vägnar,

> JOHN BRUNNER, Ordförande. C. G. AXELL, Sekreterare.



## Dödsfall





ALGOT A. BERGLOF, metallurgist and mechanical engineer, died in the city of Strängnäs, Sweden, the 2nd of November, 1914. Borglof was born in the province of Helsingland, Sweden, the 31st of May, 1861. His technical education was received in the Technical School of Stockholm, and the Mining and Metallurgical School of Falun. In 1889 he left Sweden for the United States, where his

first engagement was with Washbourn & Moen Mfg. Co., of Worchester, Mass. In 1892 Berglof left that concern for an extended tour of study to the most noted centers of the iron and steel industry in the United States. That year the historic strike at Homestead broke out and Berglof accepted a position there during that troublesome period. One result of this was that Berglof became one of the victims of the poisoned food served to the strike breakers and it required a trip to Sweden and a year's time to regain health sufficiently to be able to work. The effect of this and the treatment received by the Homestead management was the darkest memory Berglof had of his twenty years in the United States.

In 1893 Berglof again went to the United States, this time at the expense of the Swedish government, and the first object was, of course, the World's Fair in Chicago. A Swedish Engineers' Society existed at the time in Chicago, and of this he became a member. 1895 to 1897 Berglof was superintendent for the open hearth furnaces at the Kellogg Weldless Tube Company's plant at Findlay, Ohio, and leaving there he became assistant superintendent at the Griffin Wheel Works in Chicago, which position soon ended, as stagnation in business set in. That same year he had a few months' work at the Minnesota Iron Company's plant at Two Harbors, Minn., and from there he went back to Sweden, where he had received engagement as chief engineer for the extensive works at Halstahammar. In 1898 to 1900 Berglof held a similar position at Kolswa works. After that he labored to establish a stock company for the manufacture of steel castings, but did not succeed to raise the required capital and in 1892 he again went to the United States, commissioned by a Swedish machine shop company to make certain investigations, and later that year he was engaged by another Swedish concern in an effort to dispose of certain patents. In 1903 Berglof was engaged by the American Glucose Company and later by Obermeyer & Company, dealing with foundry supplies as traveling engineer to introduce to the foundry trade a new substance used as binder in core making.

In 1907 and 1908 Berglof assisted Mr. Jones in his experiments to utilize certain iron ores of inferior quality found in great abundance in Michigan and other localities. A plant was erected at Iron Mountain, Michigan, and a great many changes were made during the progress of the experiments, but without conclusive results.

During his work as metallurgist Berglof had for years speculated on the possibility of producing wrought iron direct from the iron ore, and the experiments at Iron Mountains gave him valuable hints as to what may be expected by certain processes and apparatus and what may not. As he did not have free hands in the experiments being made at Iron Mountain, he left that concern and went to Chicago, determined to try to raise a sufficient amount of money to demonstrate by preliminary experiments the correctness of the theories he advanced and to take out patents in the United States on his invention. This was in the year 1909 and the newly formed Swedish Engineers' Society of Chicago, of which Berglof was a member, became indirectly his support, as a number of its members subscribed money to carry on the project.

In the fall of 1910 Mr. Berglof went home to Sweden and after a long period of illness and difficulties he finally succeeded to interest Uddeholmsverken sufficiently to start experiments on a larger scale. This work was repeatedly interrupted by illness and other difficulties, but Berglof had the satisfaction to see forgeable wrought iron produced in this furnace and the company made arrangements to build a larger one. Then the European war broke out and stopped all work for progress, and so in December Algot Berglof quietly passed away in his mother's home in Strängnäs, Sweden.

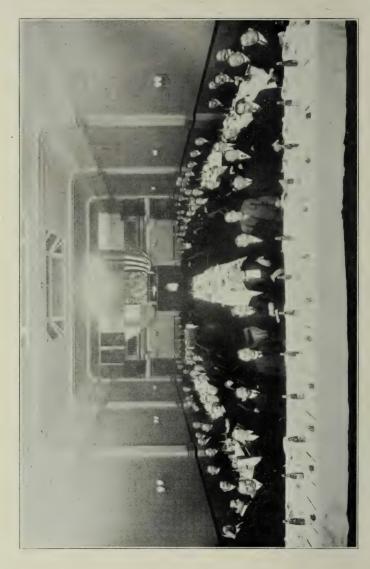
The great number of people who were acquainted with Berglof will, I think, agree that he was of an upright character and open disposition, a true friend and an able engineer.

We are indebted to Mr. Elof Berglof, a brother of the deceased, for the data given above.



OSCAR E. CARLGREN afled i Chicago den fjärde Januari 1915. Född i Falun, Sverige, den 30 Juli 1888 anlände Carlgren till Förenta Staterna vid 18 års ålder och erhö!l anställning såsom maskinritare vid Aurora Automatic Company, där han arbetade i två år, hvarefter han erhöll anställning såsom designer vid Wahl Adding Machine Company i Chicago, där han avancerade till chief

draftsman, hvilken befattning han innehade vid sin, mänskligt att betrakta, alltför tidiga bortgång. En ung hustru nu boende i Aurora, Ill., och föräldrar i Sverige sörja närmast den bortgångne, och Svenska Ingeniörsföreningen beklagar djupt förlusten af denne unge lofvande ingeniör. Frid öfver hans minne!



at the Svithiod Singing Club at their Seventh Annual Meeting, Jan. 16, 1915. THE SWEDISH ENGINEERS' SOCIETY OF CHICAGO BANQUET

# THE YEARLY MEETING OF THE SWEDISH ENGINEERS' SOCIETY OF CHICAGO, JANUARY 16TH, 1915, AT THE SVITHIOD CLUB HOUSE.

The President, Mr. John Ericson, in the chair.

The meeting was called to order about 9 o'clock in the evening. The minutes of previous meeting of the Society and of the Board of Directors were read and approved.

The report of the Secretary, Mr. C. G. Axell, giving a detailed account of the Society's activities during the year 1914 was read. This report is printed in the Society's membership book for 1915.

The Treasurer's report was then read and will be found printed in full in the 1915 membership book. A standing vote of thanks was given to the Secretary, Mr. C. G. Axell, and the Treasurer, Mr. C. A. Bolin, for their arduous and effective work during the year for the Society's advancement.

Mr. A. Rissler as chairman of the Lecture Committee reported its activities during the year 1914, and this report together with abstracts from the lectures will be found printed in this membership book.

Mr. Fred Seaberg as chairman of the House Committee gave verbally a short report and called attention to the fact that he was fortunate in having enriched the treasury of the Society, instead of the House Committee always having been a source of expense. The increase in membership and the number of attendants at the meetings and the "doings" of the Society, coupled with judicious management, had made this possible. A standing vote of thanks was given Mr. Seaberg and his committee for their successful work in behalf of the Society during the year 1914.

Mr. Charles Engwall, chairman of the Library Committee, read his report which will be found elsewhere in these reports. From Sweden the Society had gratuitously received Jern-kontorets Annaler, Teknisk Tidskrift, Industritidningen Norden, Svensk Export, Tegel. Svensk Filatelitisk Tidskrift, and from the United States Swedish-American newspapers "Hemlandet," "Svenska Amerikanaren," "Svenska Amerikanska Posten," "California Veckoblad."

As the chairman of the Convention Committee, Mr. John Brunner, was not able to be present at the meeting, Mr. C. G. Axell, secretary of the committee, read the report of the work of the committee. This report will be found printed in the 1915

membership book. In view of the deplorable situation caused by the European war, the outlook for this convention is not so bright as may be wished for, but a great deal of good can be expected if the Swedish Engineers of the East of this country in convention meet the Swedish Engineers and Industrial men of the West. The work as outlined is therefore kept up and all are urged to take a personal interest in the matter.

The Publication Committe, Mr. R. W. Fogel, chairman, reported that genikårens "Trasdocka" for the year 1914 was ready for distribution and hoped the work of the Publication Committee would be found acceptable. "Trasdockan" was then distributed and all admired the drawings and the good-natureed wit and humor throughout.

Mr. John Ericson made a speech reviewing the incidents of the year and thanking the vice president, Mr. Carson; the Secretary, Mr. Axell; the Treasurer, Mr. Bolin, and all the members of the Board of Directors for their active co-operation in the work for the Society's advancement and the membership at large for their loyal support. Mr. Ericson then turned over the gavel to the newly elected President, Mr. Albin P. Rissler, who in a well considered speech reviewed his experience with Swedish and Scandinavian engineers societies since the year 1892 up to the present time, and his aspirations and hopes for the future.

#### NEW BUSINESS

The president then rapped for order for a short business session.

Mr. John E. Ericsson read and proposed for adoption by the Society a resolution objecting to the public censure administered by the City Council of Chicago for a professional report worked out by a committee of engineers, of which our fellow member, the City Engineer, Mr. John Ericson, was a member. This report dealt with conditions in the administration of the Drainage Canal, the manufacture and sale of electric current produced at the hydraulic power station at Lockport, Illinois, and the whole matter was treated in a scientific professional manner becoming honest engineers, but the result of the investigation did not please the City Council and therefore the public censure. The Society adopted the resolution, and Messrs. John E. Ericsson and C. G. Axell were appointed to make a draft of the resolution and present it to his honor, Mr. Carter H. Harrison, the Mayor of the City of Chicago.

After this resolution was disposed of, the president announced his appointments for the several committees:

Lecture Committee—Victor Nicholson, John A. Nyden, and J. P. Fogel.

House Committee—Geo. G. Ehrenborg, L. G. Göranson, and Hans Sundstrom.

Library Committee—Sven Holmes, Carl Bergquist, and Ivar Wandell.

The meeting now adjourned for the banquet, and at the coffee the President called on the newly elected Vice President, Mr. John E. Ericsson; the Secretary, Mr. G. A. Akerlind; the Treasurer, Mr. Axel Akers, and the two new members of the Board of Directors, Messrs. John Ericson and K. G. A. Bjurstrom, to show themselves and tell what was on their hearts.

This over the president appointed Mr. Clarence L. Ongman toastmaster for the evening. The first called on was the Swedish Consul, Mr. Puke, who honored the Society with his presence. Consul Puke remarked that it was a pleasure for him to be present at these meetings of Swedish and Swedish-American Engineers and Industrial men, and he emphasized the fact that the efforts of our mother country to establish closer relationship with her sons in this great country apparently found more response with the engineers and more willingness for co-operation than with any other group of men, and he pleaded earnestly that our old Fatherland in these trying times in Europe needed the devotion of her sons wherever they may be.

Mr. Nelson of New York was also a guest of the Society. Mr. Nelson in 1892 was one of the prime movers in forming the first Swedish Engineers' Society in Chicago, and he expressed his pleasure to now have the opportunity to see for himself how the modest beginning of that time had developed into a powerful organization, a credit to the Swedish engineers and industrial men in these United States and a source of pride to our old Fatherland.

A number of members spoke and at intervals Mr. Palmborg with Mr. Browall at the piano rendered some excellent bass solos which were much appreciated; and Messrs. Fred Seaberg, Hedman, Palmborg and Ture Johanson gave us some good quartette songs, besides "Du gamla, du fria" and the Swedish and United States national songs by all present standing.

The meeting was in every way a success. About 75 men took part in the event.

G. A. AKERLIND, Secretary, 1915.

## SVENSKA INGENIÖRS-FÖRENINGEN I FÖRENTA STATERNA

## The American Society of Swedish Engineers

271 Hichs Street

BROOKLYN, NEW YORK

N. L. Malmros, ordförande, J. E. Franzén, vice ordförande; Eric öberg, sekreterare; Ernst öhnell, kassör.

Föreningen grundlagd den 11 Februari 1888

För närvarande 288 medlemmar

## SVENSKA INGENIÖRS-FÖRENINGEN I CHICAGO

The Swedish Engineers' Society of Chicago

916-620 CITY HALL SQUARE BUILDING

139 North Clark Street CHICAGO, ILL.

Albin P. Rissler, ordförande; John E. Ericsson, vice ordförande; G. A. Akerlind, sekreterare; Axel Akers, kassör.

Föreningen grundlagd den 10 Oktober 1908

För närvarande 276 medlemma

## The Swedish Historical Society of America

Founded 1905

AIMS-

To collect a central library of books, papers and manuscripts written by, or relating to, Swedish-Americans; also works on the history, culture and literature of Sweden

To issue publications relating to the Swedish people in America. To encourage and promote the study of Swedish literature and history in American universities and colleges. DONATIONS-Gifts to the library should be addressed: Orrington Ave. and Lincoln

St., Evanston, Ill.

MEMBERSHIP—Any person who desires to aid in furthering the work of the Society may become a member by remitting the annual fee of \$2.00 to the secretary or to the treasurer, Mr. M. J. Engberg, 901 Belmont Ave., Chicago.

President, 1915, David Nyvall; Vice President, C. A. Lindvall; Secretary, F. A. Andrén, 2133, 175 W. Jackson Blvd., Chicago; Treasurer, M. J. Engberg; Librarian

C. G. Wallenius.

The library is located in the Swedish Theological Seminary, 2408 Orrington Ave Evanston, Ill., where it may be consulted at any time on application to Professor C. G. Wallenius.

JOHN CRERAR LIBRARY, Chicago, Ill.

Scientific reference library. All technical literature in the English and foreign

Open free to the public from 9 o'clock in the morning until 10 o'clock in the evening Located on the 6th floor of Marshal Field Building, entrance from Wabash Ave.

PUBLIC LIBRARY, Chicago, Ill.

Michigan Avenue, Washington and Randolph Streets. Reference room for Unit States Patent Office, entrance from Randolph Street.

## Svenska Klubben

Charles S. Peterson, President; Bror Oscar Larson, Vice President; Robert Hvitfeldt, Secretary; George F. Anderson, Treasurer; Nels H. Guldstrand, Librarian.

Board of Directors

Charles Theo. Green, G. Bernhard Anderson, Ivar Holmstrom, Eric Werner John F. Sandell, Axel Karlsteen.

All visiting engineers cordially invited

## Svithiod Singing Club

624 Wrightwood Avenue

President, John E. Ericsson; Vice President, Erick B. Davis; Recording Secretary, Hermann Olson; Financial Secretary, Albert Swanson; Treasurer, John P. Friellun

Moard of Directors

F. Seaberg, Olof J. Ohlson, F. O. Anderson, Sig. Franson, John O. Nelson, E. E. Hall.

# Progress and Engineering

A Paper Read Before The Swedish Engineers' Society of Chicago,

May 17, 1913, by

#### THEODORE A. BERGEN.

About ten years ago Professor Perry, of the University of Oxford, delivered a remarkable lecture, contrasting the education given in our days to the youths of the ruling classes with the education which would be necessary to enable men to govern a country wholly dependent on its industries. I take pleasure to quote the following passage from this very interesting lecture:

"Are you aware that in one ton of coal there is as much energy, as much actual work, as may be done by forty thousand good laborers in a ten hours' day? Our best steam engines utilize only one tenth of this energy at the present time. But even now we know that the cost of the most unskilled work done by man is a thousand times the cost of the same work wherever it may be done by the best steam engines. One fact of this kind properly considered is worth many long essays about the effect of the engineer in altering all the character of our civilization. It is labor that is the true standard of wealth. The steam engine has added incalculably to the wealth of the world. We forget that man is no longer needed for unskilled labor, so that when we use unskilled labor we are using the materials which God has given us in the most inefficient manner possible. Furthermore, it becomes sweated labor, it unduly takes skilled labor, it starves invention, and it brings up base, ill-fed families."

If this was true ten years ago, in England, it must be true today, in this country, to a still higher degree. No civilized country has such enormous natural resources as has this country and in no other nation can the labor question be more acute than what it is in the Uniter States today. There seems to be a feeling of general unrest in the air, and one asks another "What is going to happen?" "What will come next?" There is a wave of crime and misery sweeping the continent, graft and corruption in government affairs are so common that we think little or nothing about it; the chase after the "almighty dollar" has become more furious than ever, and we are forced to admit that there is some truth in the statement that a great number of the American people have recognized an eleventh commandment, which reads: "Get the money, no matter how, but get it."

If people could only be taught to believe that by looking after the wellfare and happiness of their fellow-beings their own interests would be strengthened and promoted, how much would this not affect these cruel conditions. If people would only believe the philosophy of the greatest reformer of all times, that those who seek first the happiness of their fellow-men need not worry about their own, how much more contentment and happiness would we not find. And it is people with this spirit that we need to change our presentday conditions; it is engineers with this spirit that we need because it is engineers who do things, and it is engineers who shall finally govern countries, and the world, and they shall see to it that the raw material which God gave us is not used in its most inefficient form, or that forty thousand laborers are not used to do the work which can be done better by a ton of coal, a boiler, and a steam engine.

The professional politicians have shown, for generations, in the most flagrant way possible, that they are not capable of governing a country as it should be governed. It is up to the engineer to take the politician's mantle. Our kings and dukes of industry have shown that they are not capable of solving the labor question. It is up to the engineer to do it. It is left to the engineer to harness the forces of nature, to promote sound industries, to build well lighted and well ventilated factories and while so doing always to consider as the prime factor the happiness and contentment of those beings whose mission it is to see that wheels of industry keep on running after they have once been started.

You often hear a young man nowadays complain about the difficulty of "getting ahead," how much better it was "in the good old days" and what a "snap" the "old man" had compared with himself, and so on and so forth. There is some truth in this. But it should not make a young man discouraged, on the contrary, it should serve as an incentive. We all know that it is easier to start a work than to finish it; and be sure that the work which the "old man" started is yet far from finished. You can begin to chisel a piece of marble of which you want to make a statue with a rather coarse tock, but when you come to perfect the figure, or the features, and so to say put character and soul into the work, you have got to use a mighty keen and fine instrument. Which, in your opinion, is the most important and which carries with it the greatest responsibility? And this is why "the old man" in "the good old days" was said to have a "snap" while the young man of today is complaining about invincible difficulties. The "old man" was using the coarse chisel and was getting along very nicely, because it was working in the rough. But today this chisel is worthless, today is the time when commences the work of putting character and soul into the monument which the old man roughed out, and to that, keener and more delicate instruments are required. It is up to the young man of today to acquire these instruments, and it is up to all of us who are engaged in this finishing work to keep our instruments in the right condition, that they do not spoil the delicate material with which they may come in contacts

History teaches us that a nation, a people, cannot for any length of time remain at one and the same point on the scale gauging its civilization, its culture. It is either a case of further progress or one of—regress. History also tells us of people swinging into power and climbing the ladder of civilization up to the highest rung of its time, how they all, without exception, whether slowly or precipitately, always surely, fell back again into oblivion or were conquered and enslaved by some other nation inferior to them in culture and refinement, but superior in mind and morals. In casting a glance backwards on the tribes or nations of the world one is almost tempted to believe that with the highest culture and civilization came a relapse in morals and a decay of the mind. And these two—looseness in morals and mental pollution, have been and are the surest enemies to the progress of mankind.

America is today, in many respects, leading the world. The progress of the American nation is nothing short of marvelous; it has reached a stage which people before us never dreamt of. Will it climb still further or has the curve reached its maximum? Will the 20th Century go down in history as the turning point of a great peoples' great fight for progress, or will it, for generations to come, stand out as a monument for the advancement of mankind, for deeds accomplished, so great, so glorious as to surpass by far even the boldest dreams of the boldest among us? It depends on us, it depends on the engineer of today, what the record will look like. We have the keys of the future, it is up to us. May each one realize the responsibility which rests on him no matter what his position is, and may each one do his duties, not only those necessary for existence, but those which he owes to his fellow-man, to society, to mankind.

We will now go from generalities to a few specific examples, which will illustrate some details of what has been said.

Some time ago Senator Aldrich stated that if the U. S. Government was run on sound business principles it would mean a saving to the country of \$300,000,000 per year. President Taft himself has stated that \$40,000,000 are wasted annually in the War Department. Take the Panama Canal. It was estimated it would coast \$170,000,000. It is no longer a secret that in all probability it will run over the \$500,000,000 mark before it is completed. The appropriation for forest service from 1896 to 1910 was \$20,000,000. Of this a little less than \$2,000,000 were used for actual improvements of the national forests. The District of Columbia once borrowed from the government \$21,000,000. The District of Columbia has now forgotten that it ever borrowed this money, and the government is now trying to collect it.

I could quote hundreds of examples like this. What do they all show, what do they prove? They prove the truth of what has already been said, that the professional politicians are incapable of running the affairs of this country as they should be run, and that it is high time that others should take their places. These others should be Engineers, not necessarily lawyers or orators—the should be experts in their various lines, they should be men with morals—and hearts.

The arid region of this country covers an area of about 600,000,000 acres. It is estimated that 10 per cent of this, or 60,000,000 acres, can be reclaimed by irrigation. And the natural resources of this region are so great, the deposits of iron, coal, petroleum, etc., are so immense that figures hardly give us a right conception of their magnitude. At present this immense wealth is, so to speak, put in cold storage. The government, through its "conservation" act, withholds these resources from the people. Some time, when the government has grown a little, these areas with their wealth will be thrown open to the American people, to the korld, and will be forced to yield to humanity their latent and hidden treasures. The field that this will open for the Engineer can only be speculated upon.

There are over 30,000,000 H. P. in water falls in the mountain streams of the west. This power is now wasted because it cannot be developed. The government, having no right to the water, took the land wherever there was a possibility for making a development. Think what a loss to the country of having this power going to waste. Think how many millions of tired hands could be supplanted by the electric motor, if these waters

were developed. This is something for the electrical Engineer to think of.
Some time since Louis Brandels, I believe, made a statement that
\$1,000,000 per day could be saved by the railroads of the U.S. through
scientific management. Here seems to be a great field for the efficiency
Engineer. Waste, in no matter what form, is not only objectionable—it is
a wrong, it is an abuse of the material which has been intrusted to us.

And while we are talking about savings and efficiencies, let me quote another example. There are today about 200,000 industrial plants in this country, having an aggregate annual output of \$25,000,000,000. It is a fact, because it has been proven, that proper lighting increases the output of from 2% in steel mills to 10% in textile mills and shoe factories. Let us say that on the average the increase is 3%. This menas a saving of \$600,000,000 per year, or \$2,000,000 per working day. Just think of it. The electrical engineer can save this country \$2,000,000 per day simply by providing proper lighting for its factories. And in these \$2,000,000 is not taken into account the improved quality of the output, neither the savings due to decrease in accidents and deaths.

It must not be forgotten, however, that this enormous saving is due to the bettered lighting conditions only indirectly. Directly, of course, it is due to the help, the operatives. And it is well to bear this in mind. Because if such a factor as artificial lighting, properly considered, is of so great importance, how much more important are not such factors as proper buildings, proper ventilation and proper working conditions in general.

Statistics for this country show that the average cost of all finished products is made up of ½ labor and ½ material. Labor, therefore, is a big factor in the cost of turning out our products. Increased efficiency of labor should mean a considerable reduction in prices and a saving for the people and for the country. Labor efficiency is dependent upon the help, upon the individual, and more closely, upon the will of the individual. This, in turn, is influenced to a great extent by the physical conditions under which the individual is working. Any arrangement, system or rule, which improves the conditions under which a man works, does not only have a conscious, physical effect upon the man, but a subconscious mental effect upon the man's will. The result of the first is physical improvement, contentment with conditions and increased happiness, the result of the latter is interest in the work and increased efficiency.

This is not guess work. It is facts which have been demonstrated over and over again. And only by having these facts clear in our minds can we engineers rightfully pursue our profession. It teaches us, that when we are designing a factory, a mill, an industrial plant, if we wish to properly guard the interest of our client, or ourselves, the means of doing so is by guarding the interests of the people who are to work in these places. We should design the best buildings that we know how, provide for plenty of light and air, provide pure water and anything that tends to safeguard life, health or happiness of the workers. Mere business principle tells us that this is the right thing to do, because the cost of bringing this about is inconsiderable compared with the enormous savings which result from increased efficiency in laboor, as has already been pointed out. If the introduction of proper lighting alone in all the industrial plants results in a saving were all the plants of modern construction, equipped with proper ventilating or air purifying systems, cleaning systems, etc., etc.—in short,

ideal plants? This of course can only be speculated upon; the result must be stupendous.

But there is another side to this, far more important than that of investment and profits; that is the human side. We must remember that this country is dependent largely upon its industries, the industries are dependent upon the working classes and therefore the country is dependent upon them. If a man, for his existence, is dependent upon a certain something, he is mighty sure to take good care of it. A fisherman is pretty eareful about his boat, a hunter about his gun or dog. A laborer is more than a thing or an animal. He is human, same as you or I, he has a mind and a soul and is subject to the same feelings and emotions as we are. He should be taken care of, he should be treated as we, ourselves, wish to be treated. He is a machine in the first state of development. We owe it to God, to him and to coming generations to develop and perfect this machine. This cannot be done by force, law or harsh treatment. It requires experimentation, patience and good will. It requires also enthusiasm and the setting of good examples.

"The truest stories about man are the fairy stories; they are true at all times, of all races of men, and the truest fairy story is that which tells how men who looked back and not forward are turned into lumps of rock or pillars of salt."



# Idealism and Engineering

By G. A. AKERLIND

Member of the Society.

At the meeting of The Swedish Engineers' Society of Chicago, May 17th, 1913, our fellow member, Mr. Theodore A. Bergen, Chief Electrical Engineer with Lockwood, Greene & Company, Chicago, read a paper entitled "Progress and Engineering." The paper caused a near panic as the subject was treated so radically different from the matter of fact style supposed by ancient customs to be the only way an engineer can or may discuss anything before a body of engineers.

The paper referred to is printed in our Year Book for 1913 and certainly demands our serious attention. I am fully aware that many will question whether an engineers' society or engineering publication is the proper forum for discussing such subjects as Mr. Bergen's paper suggests, but why not?

Who have designed our modern mining methods and mining machinery, our blast furnaces and steel mills, our railroads and its equipment, our steam ships and the machinery for their loading and unloading, our war vessels and canons, the machinery for fabricating the thousand and one different articles that now are necessities of life, the process and machinery for making cement. We discovered and worked out the chemical process by which organic and unorganic matter, previously uscless, now is a necessity for our industries? Who have put electricity to work, replacing

the horse and man and eliminated distances? Who have designed our bridges, our tunnels, our skyscrapers, our cities?—and keep on as long as you please, at the end you will find—the engineer.

If the engineer has been able to accomplish all those things, then he might be expected to understand something of other human activities tending to better the existence of the human race, but must we not acknowle edge a strange absence of engineers in most such activities. True, he may design at the request of a philanthropist or "civic body," a dwelling with warmth, light and air and sanitary appurtenance to properly house "poor people," but thus he affiliate himself with any movement to try to moderate or lessen the gulf that seems to be widening between the care takers and the taken care of, or the so called nonproducers and the producers? Where do you find the engineer in the administration of communities? You may find saloonkeepers and bartenders and all sorts of men there, but rarely, if ever, will you find an engineer. You will find him tucked away in a corner, "a hired man," working on drawings and specifications for neces sary improvements of the community, at every turn hampered by "consider ations" of politicians and their constitutents, eager to get something at the expense of somebody else.

Why should the engineer always be "the hired man"? As he is absent from the government of smaller communities, so of course he is absent from the larger. Whoever heard of an engineer in the State Legislature or in Congress? But we do hear of appointments to "important" positions and when we learn of the appointees' previous training and carrier, we do not know whether we should weep or laugh. Is it not peculiar that the engineer with his long expensive training and his accomplishments should be a factor of so very little moment in our communities and nation's social, political and humanitarian advancement. Some of the reasons for this, I think are not so difficult to see, but may be passed here for the time being.

The most important thing for the engineer at present is to wake up and realize his duties and his opportunities. With such realization will come an effort for a change, an improvement, and the engineer's day will come when he will no longer simply be the polished tool, the scientific encyclopedia applying the accumulated engineering knowledge of centuries to accomplish the wonders of our industrial age, and for a compensation we are not proud to speak of, but he will take the place that is rightly his in the front rank of the idealists who strive not only for the ultimate perfection of the means of production but also for the ultimate perfection of humanity, high morals, justice and happiness.

When I went to work as a boy, the working hours for older men in the mill was from four o'clock in the morning until eight o'clock at night, and for younger men from six o'clock in the morning until eight at night, and some ten years later, the ten hour work day was established. This ten hour day seems to have been the standard for industrial nations for the past twenty or thirty years, and strange enough seems likely to remain the standard for some years to come.

What is the proportion of output, result of labor, of the man of today, compared to the man of say twenty years ago? Nobody knows, but those in the harness for the last thirty or forty years may make a guess for the branch with which he is familiar. Is it one to two or one to four or one

to ten? Suppose the man of today produces as much as two men twenty years ago. Is it not strange that the man of today should have to work ten hours a day just the same as the man twenty years ago? Where does the much talked of benefit of the advancement of civilization come in?

It is no wonder that the universities are establishing departments for the study of social problems. Any one who cares to see things as they are and reflect over what they ought to be, or could be, can not fail to realize the complication of the problem, and the apparent hopelessness of the situation. Can poverty be obliterated by alms? Will slums in the large cities disappear because of slum work? Some good people seem to wish us to believe that that is the only thing that can be done and even intimate that poverty is a God-made institution!

"The social problem" will come more and more to the front not because the top layers of the pyramid of society are anxious for improvements, but because the bottom layers refuse to believe that their only function on this earth is to work, "produce" and die. Statesmen and scholars, priests and reformers, are endeavoring to locate the trouble and to find a remedy. Where have the engineers been all this time? The capitalist decides to build a steel mill and the engineer is put to work. He figures out the buildings, machinery and apparatus needed for a certain output and the amount of capital required. He figures labor at its market value—that is to say the lowest possible figure to get men to work for and the cost of producing a ton of steel is determined. Here the engineer's function generally ends and the managers starts.

"Labor" is for the enegineer a mere quantity like horse power, and regarded very much like phosphor in steel, an evil that by all means ought to be driven out, and I believe that it is this idea and the possibility of carrying it out to its fullest extent in this country, that have made such records possible of which we now boast.

But where comes the human element in in the engineer's calculations? Well, that is mostly an "unknown quantity" and if considered at all, it must cost as little as possible and barely meet the requirements of existing laws. Can the engineer do anything in this matter; isn't he merely "a hired man"? Well, yes here is where the idealist engineer will have an opportunity. Suppose he had studied "sociology" not only from the books but from real life and had a desire to do unto others as he wished others to do unto him, to do what he could to make it a little easier for his fellowmen, and not harder, to help earry "the white man's burden," to prove himself an engineer with brains and a man of heart. Don't you think he would find opportunities to put into his calculations and his plans a little more of the human element which may cost some gold to be sure, but that would tend to improve the conditions now existing. We now have a great many specialized engineers. Is it not time to add a man to the list, the "Social Engineer," who applies his training as an engineer to endeavor to bridge the gulf between the automatic machine and its operator, between "capital and labor," between riches and poverty.

Let us have more idealism in engineering, let the engineer apply his knowledge, his genius, his brains as intensely as ever, but let him be more and more a man of heart.



# THE OPERATION OF A MODERN TELEPHONE EXCHANGE

A Paper Read Before the Swedish Engineers Society of Chicago October 18th, 1913, by

F. W. IGGBERG.

In previous papers read at the Swedish Engineers' Society we have heard about rapid transit communication and the production of electricity and gas leaving us only one more public utility, the telephone, to discuss.

This subject is by far not as simple as we consider it and it will be necessary for me to touch only on a few main features of the art of telephony and that very lightly on account of the tremendous scope of the subject. In only one part of this talk will I go into the technical end of it at all, and that is the operation of the main circuits required for connecting one subscriber to the other, which probably will be of interest to most of you.

The conception of the possibility of transmitting speech by electricity seems to have occured to many long before it was accomplished. Although the telephone is now taken for granted by most people as if it were a part of the natural phenomena of this planet, it is in reality only a few years since it was invented. In fact, the invention was made as late as 1875, patented 1876, and exhibited to the public the first time during the Centennial Exposition in Philadelphia the same year.

The inventor, a young Scotchman, Alexander Graham Bell, was during this time a professor of elecution and a teacher of deafmutes in Boston. Being an ardent student of the science of electricity, then you might say in its infancy, he stumbled over the principle of the telephone while experimenting with a system of multiplex telegraphy.

The original invention consisted of a thin piece of iron glued to a thin diaphragm made of skin, an electro-magnet supported close to and in front of this piece of iron and a line connecting it with another instrument like it. A battery was inserted in this line to energize the magnets.

The theory you of course all know, but it may not hurt to repeat it. As you speak in front of the diaphragm the sound vibrations cause this to vibrate also. As the distance of this diaphragm from the electro-magnet increases and decreases, the lines of magnetic force threading the coil vary, inducing an electromotive force in the winding. As a closed path is provided a current will flow through the winding of the magnet at the other set. The change in strength of this magnet will cause the diaphragm to vibrate in exactly the same manner as that in the first set, causing the sound to be reproduced.

Later the battery was removed from the line and permanent magnets substituted. This removed a lot of noise from the line but made the instruments very weak, and it was only after the introduction of the transmitter by Edison that the telephone could be used for any great distances.

In the transmitter the diaphragm is made to act upon carbon granules, the resistance of which varies greatly as the pressure varies, thus increasing and decreasing the amount of current sent out on the line.

The next big step is marked by the introduction of the induction coil in the circuit. The change in resistance of the transmitter is thus accentuated by reducing the resistance of the line to that of the primary circuit. The coil, which is nothing but an ordinary transformer, also steps up the voltage of the current, thus reducing the loss in transmission through a high resistance line.

These instruments, with slight modifications and improvements, are still in use.

The original telephone was directly connected with only one other instrument, and no means were supplied to connect it with anybody else. Under those circumstances progress was of course very slow and it was only after a connecting panel or switchboard modeled after the telegraph panels than in use was introduced, that the telephone became of any commercial value.

This panel was followed by the Gilliland peg-switchboard and later about 1878 by the original form of the present day switchboard designed by the engineers of the Western Electric Co.

In this board the subscribers lines and their associated signals were terminated in one single place in the face of the switchboard and connections were made by means of flexible cords.

These switchboards, however, could only handle a few lines, as the operator had to reach each and every line and a system of transfer lines between the operators was installed whereby the call that came in to one operator could be trunked to the operator who handled the line of the called subscriber.

This was a very slow process and was soon superceded by the multiple switchboard in which each line in addition to being terminated in front of one operator with both a jack and a signal, also was multiplied with a jack in reach of every operator in the exchange.

The original multiple boards were started as early as 1879 and although it has been much changed and much improved since that time the principle has survived and is used in every modern exchange today.

All of these switchboards were of the magneto type with batteries and a hand generator in each subscribers set and are usen even at this time in small central offices.

For the larger exchanges however the switchboards have kept changing and improving right along. The invention of the lamp signal was a great step forward and may be the most important change was the adoption of the so-called common battery system in the early nineties.

In this system one battery located in the central office furnishes all the current required as well for talking as signalling and greatly simplifies the subscribers sets.

The multiple common battery switchboard is the type now used, of course, with a great deal of improvements since it was first gotten out.

The development of the telephony has been done almost entirely in the United States and very little has been added by Europe. In fact, with the exception of the work done by Henry Cedergren of Sweden and some addition to the instruments for long distance telephony, also of Swedish origin, you may say that the development is entirely American.

Most of the European countries with the exception of the Scandinavian countries, Germany and England have not taken kindly to the telephone, and their phones are few and of an out of date construction.

Since we now have followed the marvelous development of the art of telephony up to the present time, I will take the liberty to take you on A SHORT TRIP THROUGH A MODERN TELEPHONE EXCHANGE such as is used today in Chicago, New York and other large cities.

The wires from your telephone, as they leave your house, are run to distributing boxes placed all through the city at certain intervals on poles or back fences. These are connected to a system of underground cables by means of a small lead covered cable which is spliced into a larger cable at the nearest manhole.

All these cables again are run to a manhole in the immediate vicinity of the exchange and spliced into 600 pair cables which are run into the terminal room of the exchange and terminated on what is known as the MAIN DISTRIBUTING FRAME. On one side of this frame called the vertical side are mounted protectors by means of which the apparatus inside of the exchange is protected from lightning discharges or high potential currents. To this side of the frame are connected the wires from the outside cables and to the other side or the horizontal side is connected a set of cables, the other end of which is connected to the horizontal side of what is called THE INTERMEDIATE DISTRIBUTING FRAME. This side is also connected by means of cables to the multiple jacks in the switchboard. The other side of this frame is cabled to the answering jacks and lamps and also to the relays.

The two sides of these frames are connected by means of loose so called jumber wires. The object of these frames is to make it possible to connect any line in the multiple which, of course, has a fixed number to any cable pair running to any part of the exchange district, also to be able to use any answering jack in connection with any numbered line. This is made possible by only changing the cross connections at the frames and means that the same number can be given to a subscriber even so his telephone is moved and that a line can be changed to any operator without changing the number.

Suitable iron racks are also provided for mounting line and trunk relays and also the repeating coils in the cord and trunk circuits. These are called simply RELAY RACKS and COIL RACKS.

The power equipment required to handle an exchange, although it may have as many as 10,000 lines, is surprisingly small and simple.

A 48 volt STORAGE BATTERY is supplied. This is tapped at 24 volts for all talking circuits and most signal circuits the 48 volts being used only in connection with the ringing machine. This storage battery has one side grounded, usually the positive. A MOTOR GENERATOR SET is provided for charging the battery, usually utilizing whatever commercial current is available but also arranged to be run by a gasoline engine in case of emercency.

A couple of motor generator sets with interrupter attachments are also provided for ringing purposes.

These furnish either alternating current to every other segment on the RINGING MACHINE, the other segments being connected to the 48 volt battery or is by means of a superimposed battery current changed to a

pulsating current, positive or negative, as desired for ringing party lines.

A POWER BOARD is, of course, provided, on which all switches and starting and measuring instruments are mounted.

All battery connections to the switchboard are distributed from a FUSE PANEL. All of these battery leads are fanned out over this panel and connected with lugs. These lugs again are connected to the battery bus bars through 1½ ampere fuses. The size of the fuse indicates how little current really is required for talking as well as signaling. One single lead like this takes care of twenty line lamps in parallel in general practice without blowing the fuse and in fact could supply current to a lot more.

In order to provide means of testing, a Wire Chief's Desk is required, in all offices. This desk is equipped with complete circuits and instruments for testing the outside as well as the inside end of the circuit and also plugging up lines to take care of all calls on lines that are not working properly.

All wiring, as I have mentioned before, run from the terminal room into the operating room in a number of cables supported by cable racks fastened to the floor beams above.

In the operating room you will find two separate lines of switchboards and a number of desks,

These switchboards are constructed of wood on an iron frame and arranged for jacks and lamps to be mounted in the front, keys, lamps and plugs in the keyboard and relays in the rear of the board. All cabling to the answering and multiple jacks is also run inside of the switchboard.

The subscribers' lines are terminated in the so-called subscribers' switchboard in an answering jack with an associated lamp. The keyboard equipment consists of cord circuits for connecting the lines to other lines or to trunks to other exchanges, a multiple of which is played in front of each operator.

In the trunk switchboards, which are rather similar to the subscribers' board, the keyshelf is occupied by cords and lamps belonging to trunks from other exchanges and the entire front is occupied by jacks, as many as 10,400 in each section. These jacks are each connected to a subscribers' line and are multipled, that is reappear in the front of each SECTION so that a jack for every line terminating in the exchange is within reach of every operator.

The regular operators are not allowed to answer any questions or complaints, except giving the time, which makes it necessary for them to switch such calls to a supervising operator often without the knowledge of the calling party.

This makes it necessary to provide several desks for such operators, and in the ordinary exchange you will always find an information desk, a chief operator's desk, and a manager's desk, each equipped with direct connections with each other and with the switchboard, also listening in lines making it possible for them to observe an operator without her knowledge.

While we are talking about the switchboards a few words about the main circuits may be in order.

A SUBSCRIBER'S LINE CIRCUIT includes the wiring from the subscriber's telephone set through the frames and the relay equipment to an answering jack with lamp in front of a certain operator. This line is also multipled in front of the second operator to the right and left, making it

possible for them to help out in case this operator is crowded, while the other operators are not busy. A multiple of each line also appears in front of each trunk operator.

Each subscriber's operator is supplied with from 15 to 20 usually 17 CORD CIRCUITS. A cord circuit is terminated in two cords with attached plugs. These with the intermediate wiring serve to connect one line to the other. These circuits are supplied with means for furnishing talking current to the subscriber's line, with signalling apparatus and keys for ringing and for connecting the operators telephone set to the line. THE TELEPHONE CIRCUIT is terminated in jacks into which the operator connects her head receiver and breast transmitter by means of a cord and plug.

A CALL WIRE CIRCUIT consists of a pair of wires running from each subscriber's position to the trunk switchboard in all offices in the same exchange district.

It is terminated in a key in the subscriber's switchboard and is bridged directly across the operators telephone set in the trunk board. This makes it possible for the subscriber's operator to talk directly to the trunk operator without calling her, simply by pressing down the key.

A trunk line constitutes the means of connections from one exchange to another. It is terminated in a multiple in the subscriber's switchboard and in a cord with plug attached in the trunk twitchboard of the other exchange.

The trunk circuit is also equipped with means for furnishing talking current with signalling apparatus and with automatic ringing apparatus.

A few of the names of apparatus I have mentioned and their use may not be entirely familiar to you, so I will try to explain them in a few words.

THE SUBSCRIBER'S TELEPHONE SET consists of transmitter, receiver, switchhook, induction coil, condenser and ringer. I need not go into further detail about the first two. The switchhook serves to open and close the circuit, thus operating the signals at the switchboard and saving battery current when the set is not used.

The condenser provides a path for the alternating ringing and talking currents but leaves the circuit open for battery current, and the induction coil serves a double purpose; that of changing the varying direct current from the transmitter to an alternating current of stepped up voltage, and also as a device for vastly increasing the range of change in the transmitter set.

A JACK is a piece of apparatus designed for conveniently terminating telephone lines in a switchboard. It consists of a set of springs insulated from each other. One end of these are arranged for wire connections and the others are so formed as to make contacts with the rings of a plug when inserted into the jack.

These PLUGS consist of metal rings, insulated from each other and connected to a flexible cord with metallic conductors inside, and constitute the means of connection from one line to another. In a regular switchboard three separate contact points are provided called tip, ring and sleeve, counting from the point towards the cord.

A KEY is a manually operated switch consisting of a number of springs which by means of a lever or plunger can be made to make or break contacts as desired.

LINE CCT MULTIPLE JACKS ANSWERING JACK CALLED SUBSCRIBER BETWEEN TWO SUBSCRIBERS IN DIFFERENT EXCHANGES TRUNK CCT CALL WIRE CCT TRK MULT JACK CORD CCT CALLING SUBSCRIBER - delete LINE CCT

DIAGRAM OF CONNECTION

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A RELAY again is an electrically operated switch consisting of an electro-magnet operating an armature which in turn makes or breaks contacts as desired. Most common of the relays is the one in each line circuit consisting of a double relay, the line and the cut-off relay. The former governs the line lamp and the latter disconnects the signalling apparatus from the line, clearing it for talking. The supervisory relays are also often mentioned. These govern the operation of the disconnect lamps in the cord circuit and hence their name.

The switchboard LAMPS are small carbon-filament lamps made for different voltages from 4 to 48 volts, requiring very little current for operation, say about .1 ampere. These lamps have contact plates on each side and are inserted in the circuit by simply pushing them into a socket made for the purpose.

The INDUCTION COILS and REPEATING COILS are simply transformers. We have already seen how the former is used. The principal use for the latter is for the purpose of inductive association of two circuits that are conductively separated, such as in the trunk circuit and to permit the introduction of continuous current from the central office battery into the line without producing an appreciable loss in the alternating speech current as is done in the cord circuit.

Since we have now taken a fairly good view of the exchange and familiarized ourselves with the principal pieces of apparatus used and their peculiarities, I will attempt to show step by step WHAT HAPPENS IN A TELEPHONE EXCHANGE FROM THE MOMENT THAT YOU REMOVE THE RECEIVER FROM IT'S HOOK UNTIL YOU REPLACE IT, AFTER A COMPLETED CALL.

The simple operation of lifting the receiver from its resting place closes the circuit through the primary winding of the induction coil in your telephone set and the winding of the line relay, thus energizing and operating the line relay.

The operation of this relay connects the lamp in front of the operator to one side of the battery. This lights the lamp as its other side is permanently connected with the other side of the battery.

The operator will then answer the call by inserting her answering plug into the answering jack of your line with her right hand at the same time throwing her listening key with the left, thus bridging her telephone set across the line.

The circuit is now complete from the battery trough the repeating coil, the plug, the answering jack, your telephone set, the jack and plug again and through the winding of the supervisory relay back to the battery furnishing talking current to the line.

As this relay then operates it closes the circuit through the cut-off relay, thereby operating it and disconnecting all signal apparatus from the line, leaving it ready for talking and ringing.

The line relay will then return to normal, extinguishing the line lamp. The operator can now talk to you and will inquire about the line desired. She will then operate the key on the call wire to the exchange in which the line of the called subscriber terminates. This puts her in direct connection with the trunk operator at this exchange, who is told the number desired.

The trunk operator will in reply give the number of the trunk she intends to use and at the same time touch the sleeve of the multiple jack to the called subscriber with the tip of the plug for this trunk. If this line were busy this would cause a sudden flow of current through her telephone set, causing a distinct click to be heard.

If not she will insert the plug into the jack. This completes the circuit through relay "A" and the trunk lamp, operating the relay and lighting the trunk lamp. At the same time the cut-off relay in the subscriber's line is operated, clearing this line for ringing and talking.

At practically the same time the subscriber's operator has plugged into the outgoing trunk multiple of the same trunk with the calling plug of her cord circuit.

This completes the circuit through the sleeve of the plug and the cord lamp, lighting the lamp. It also closes the circuit through the 1000 ohms winding of relay "B" and the supervisory relay operating the former, which is a very sensitive relay, but not the latter.

The operation of relay "B" closes the circuit through the winding of relay "C," operating this relay and at the same time shunting out the lamp.

The fact that the lamp has gone out tells the trunk operator that the subscribers operator is connected to the line.

The operation of relay "C" disconnects the calling subscriber's line and instead connects ringing current across the line of the called subscriber through relay "D."

This ringing current is supplied from an interrupter with the one and larger segment connected to a 90 volt generator, and the other segment to a 48 volt battery. This arrangement is the reason why our telephone bells ring a short while, are silent, ring again, etc.

As soon as the subscriber removes the receiver from his hook the battery circuit, which is then complete through relay "D," operates this relay, opening the circuit through its contact and causing relay "E" to operate.

The operation of relay "E" shunts out relay "C," restoring it to normal.

This disconnects the ringing current and closes the circuit through the winding of relay "F," operating it.

The operation of this relay throws the low resistance winding of relay "B" in parallel with its high resistance winding, reducing the resistance and operating the supervisors relay in the cord circuit, shunting out the lamp, thus letting the subscribers operator know that the called subscriber has answered, and the call is completed.

When the conversation is over the calling subscriber hangs up his receiver. The switch hook then opens the circuit through the supervisory relay, releasing it and lighting the lamp.

When the called subscriber hangs up his receiver the circuit is opened through relay "F," releasing it, also opening the low resistance shuntwinding of relay "B" and releasing the supervisory relay in the cord circuit, lighting the lamp.

The two cord circuit lamps are now burning in front of the operator, giving her signal to disconnect, which she does by pulling out both cords. This restores all apparatus in the subscriber's line and the cord circuit and opens the circuit through relay "B," releasing it.

This again releases relay "E" and removes the shunt from the lamp, lighting it.

As soon as the trunk operator sees this lamp she pulls out the trunk plug from the multiple jack, thus restoring the trunk circuit as well as the called subscribers line.

As you see the operation of connecting one subscriber with the other is not as simple as most people think and I hope this little description will at least help you from getting impatient at the least little delay in getting your party. I will also call your attention to the fact that when you move your switchhook up and down to attract the operator's attention this should operate the relay, lighting the lamp.

This takes a little time and it is funny to know that when you get real furious and move your hook up and down yith a tremendous speed the operator is entirely unaware of your strenous effort. Pull the hook three or four times slowly and you will be surprised to see how quickly the operator will answer.

The call I have just finished talking about is termed a local call. This includes calls to subscribers in the same exchange where your telephone is terminated and also calls to subscribers of such exchanges as have direct call wire connections to your exchange. All calls to other points are termed TOLL OR LONG DISTANCE CALLS and are handled through special toll exchanges supplied with toll and long distance trunk facilities for connecting you to almost any place in the country. The operations necessary to complete a connection of this kind are many and varied and too complicated to describe in detail, but I will attempt to cover the principal ones. When the operator at the local exchange is told that the subscriber wishes a long distance call, she will plug one end of her tone test cord into the first not busy recording trunk to the long distance office and the other end into the subscriber's answering jack after her answering cord has been removed. The tone test cord used will notify all operators that your line is held waiting for a long distance call even after you have hung up your receiver.

The plugging into the recording trunk signals the recording operator at the nearest toll exchange and she will find out who you wish to talk to and if possible the number of the called subscriber. After she has repeated the order and filled out a ticket with all the information you are able to give, she will request you to hang up your receiver to be called later, when the connection is completed.

The recording operator then procures the calling subscriber on a toll switching trunk to his exchange and holds the line by means of a holding cord inserted into the jack of the switching trunk.

This gives a disconnect signal to the subscriber's operator, who pulls out the plugs of her tone test cord and is no longer interested in the conversation.

The toll ticket has by this time been sent by the recording operator through a pneumatic tube system to a directory table for any lacking information, from there to a distributing table and finally to the outward toll operator, handling toll lines to the toll point desired.

Upon receipt of this toll ticket the outward operator secures the line of the calling subscriber by inserting one end of her cord circuit into her multiple of the switching trunk. This gives the disconnect signal to the recording operator, who pulls out her holding cord and is then through with her part of the call.

The outward operator will now secure a connection with the inward toll operator at the terminating toll center desired and instruct her as to the

called subscriber's number. The inward toll operator will then get into communication with the party wanted, while the outward operator remains cut in on the toll line.

When the called party answers he will be requested to hold the line for a long distance call, while the outward operator of the originating toll exchange calls the calling subscriber back to the telephone. As soon as he answers he is told that the party he wanted is waiting for him, his line is connected to that of the called party at the outward toll position and the connection is complete.

In this connection it is interesting to know that through the introduction of the Pupin loading coil in the long distance lines the reach of the telephone has been so far extended that you are now able to talk from New York to Denver and within a few months the extension to San Francisco is expected to be completed.

The cost of this long distance line is of course enormous, as they have to be constructed of heavy copper wire so as not to offer too great resistance to the low voltage current used. It is therefore necessary to use these lines to their full capacity and this is done by using the wires for sending telephone and telegraph messages over the same wires at the same time.

A COMPOSITE CIRCUIT is a circuit so equipped that one telephone and two telegraph connections each way may be maintained in operation over one pair of wires at the same time.

A PHANTOM CIRCUIT is a circuit so equipped that three telephone connections may be maintained over two pairs of wires.

To use these lines to their full capacity then we will find that all busy lines are composited as well as phantomed, making it possible for 22 people to carry on telephone or telegraph communications at the same time over two pairs of wires, indeed if quadruplex telegraphy is employed, as sometimes happens, this number may be increased to 36.

In this connection I think some TELEPHONE STATISTICS OF THE WORLD may be of interest.

There are approximately 12,500,000 telephones and 30,000,000 miles of telephone wire in use, representing an investment of \$1,750,000,000.

The annual number of telephone conversations may be placed at 22,000,000,000, about five times the number of passengers carried by all the railroads of the world.

The busiest telephone exchange is Courtland Street, New York, which handles an average of 200,000 calls a day with 200 operators.

The following chart will give you a good idea of the telephone development in the world today.

	Number of	Telephones per
Division	Telephones	100 Population
United States	8,000,000	8.1
German Empire	1,100,000	1.6
Great Britain		1.4
Canada	300,000	3.7
France		0.6
Sweden		3.4
Denmark		3.5
Norway		2.6
Russia	150,000	0.1

The following figures illustrate the telephone development in some of the larger cities.

City Telephones per 100 Population	City Telephones Per 100 Population
Los Angeles24.0	Copenhagen 7.0
Stockholm19.9	Christiania 6.9
Chicago11.0	Berlin 5.3
Boston 9.2	London 2.8
Philadelphia 8.6	Paris 2.7
New York 8.3	St. Petersburg 2.2

All the above figures are, of course, approximate.

At this time the United States have about 67% of the total telephones; Europe has 26% and Canada 2.5%, thus leaving 4.5% for all other countries.

The cost of telephone directories alone for the New York Telephone Co. amounts to \$1,000.00 a day. These directories require 3,500 tons of paper, 7 tons of ink and 228 miles of wire for binding. This paper is made from 5,200 cords of wood, or a forest of 2,500 trees, which would cover an area of 840 acres.

The bell system of America employs 60,000 girls as operators and if you count the private branch exchange operators and those connected with the independent companies, the number will run up to fully 100,000.

One question that I believe is at this time more discussed than any other in the development of the telephone is THE ADVANTAGES OR DISADVANTAGES OF THE MANUAL SWITCHBOARD SYSTEM AS COMPARED WITH THE AUTOMATIC TELEPHONE SYSTEM.

The term manual switchboard would seem to indicate a system where the connection between two subscribers is made by hand without the employment of automatic machinery. I believe we have seen, however, that in the operation of the system I have previously tried to describe, a multitude of automatic labor saving devices have been employed. A study of the development of the telephone systems now used at the present time number of automatic operations have increased, until at the present time the manual operations are in the minority and the name manual does not correctly describe the system to which it is applied. The system is partly manual and partly automatic, indeed a form of semi-automatic.

The term automatic switchboard again would indicate a system where the connection between two subscribers is made by automatic machinery without the employment of manual labor. We need go no further than to the manual operations of removing the receiver, selecting your number and pressing a button which, if all goes well, will call the subscriber, to find that this system is also rather semi-automatic than automatic. In fact, the only way that this system is different from the manual system is that the subscriber himself through several manual operations starts a series of automatic machinery working which ultimately connects him with the number desired, whereas, in the manual system the subscriber is relieved of this labor and the operator performs a few intermediate manual operations between several automatic ones.

The advantages claimed for the automatic systems are first, secrecy, second cheapness and third speed.

Now, let us look into each of these items a little closer. It is true that in some cases no operator has to handle the connections, but as it is

necessary to employ expert mechanicians in each automatic exchange, whose business it is to listen in one connection after the other to see that everything is working O. K., it would seem that you get very little more secrecy than with operators who at all times are too busy to even think of listening to a conversation.

The original cost of an automatic system compares very unfavorably with that of a manual system, and the only reason for cheapness would be reduction in operating cost through a reduced number of operators. At the present time a very large percentage of the operators are private branch exchange operators and these would have to remain as well as operators for toll and long distance work and for answering all calls requiring human intelligence. Keeping this in mind we will still be surprised to hear that a computation of the total number of operators required in the city of New York for a manual system would amount to about 13,000 and that for an automatic system to 10,000, not counting the "mechanician operators." A study of the same conditions in the state of Connecticut shows these figures as 890 and 600 respectively. This, I believe, will show that the larger the system the more expensive will the automatic system prove to be.

The larger the system also the larger the amount of delays and the longer the time required to make connections, materially reducing the gain in speed attained at a smaller automatic system.

Taking all these points into consideration it is very doubtful if a large automatic system would offer any advantages over a manual system, particularly after some further automatic features now being developed have been added to the present day manual system.

As only about 2% of the telephone investment is placed at the subscribers stations the public in general does not realize what an immense amount of material is required to carry on telephone intercommunications between 8,000,000 people. Since we have now seen a little more of the other 98% I imagine a few words about THE WESTERN ELECTRIC COMPANY AND ITS HAWTHORNE PLANT, where the majority of this material is manufactured, may be of interest.

This plant is located on the west side of Chicago, between 44th and 48th avenues and between 22d and 26th streets, covering an area of over 200 acres.

The factory buildings are all of fire-proof construction, universally equipped with sprinklers, with sections divided by heavy fire walls, metal clad doors, concrete floors, tiled roof and wire glass windows.

These buildings contain 2,500,000 square feet of floor space or nearly 60 acres.

Hawthorne, with its-14,000 workers, is really a self-contained community. Within its gates we find a gas plant, an electric power and lighting plant, an independent system of water supply, a fire department, hospital, library and restaurant with smoking and club rooms. Hawthorne has also its own railroad system, connecting with the transportation lines which surround it.

The gas plant produces over 900,000 cubic feet of gas daily, which, although of lower grade, performs the work required for less than half the cost of city gas.

The power plant is equipped with modern turbogenerators with a capacity of 9,000 kilowatts.

The present consumption of water is about 1,200,000 gallons a day, about the same as for a city of 10,000 population. Driven wells have been sunk

and furnish water at about one-half the cost of that taken from the city mains.

In the water tower which dominates not only the other buildings, but structures of all descriptions within a wide radius, are located six steel tanks with a capacity of 213,000 gallons, directly connected to the sprinkler system and also with hydrants throughout the plant. In the fire-house adjoining the tower a battery of pumps afford an additional water supply of 3,000 gallons a minute as long as the supply in the 5,000,000 gallon reservoir holds out. A trained brigade of paid firemen is maintained at all times.

Hawthorne has a hospital for the benefit of its employees with a physician and trained nurses always in attendance, also a restaurant with a scating capacity of 900.

Continued uncertainty in the coal supply due to strikes and other conditions beyond the control of the manufacturer, has made it necessary to construct two storage bins of 10,000 tons capacity, below the ground level. Into these the coal can be dumped from the railroad cars and then be taken out by means of a railroad crane with a grab-bucket. These bins are kept constantly flooded and by these means the losses in heating value of the coal has been reduced to approximately 2% after six to twelve months' storage.

A plant with such enormous manufacturing facilities must of course produce an enormous out-put and if you will permit I will give a few figures.

During 1912 Hawthorne shipped about 9,000 switchboards, 600,000 subscribers' sets, 6,000,000 jacks, 3,000,000 protectors, etc. The cable shipped contained 3,400,000,000 feet of copper wire or enough to stretch around the earth at the equator 64 times.

For this enormous output very large quantities of raw materials are used, and some figures of the input of 1912 may be of interest:

Lead	65,000,000	pounds
Tin	2,000,000	pounds
Copper	21,000,000	pounds
Brass and German silver	2,500,000	pounds
Iron and steel	10,000,000	pounds
Paper	5,000,000	pounds
Crude rubber	500,000	pounds
Lumber	10,000,000	feet
Platinum	\$300,000	worth
Silk and cotton	\$1,000,000	worth



# RESEBREF FRÅN DE SVARTES VÄRLDSDEL

af

Ingeniör John E. Tjäder.\*

Vi ha härmed nöjet meddela ett längre, synnerligen intressant resebref från Congo i Afrika af den för talrika svenskar i Amerika bekante ingeniören John E. Tjäder.

Herr Tjäder, som är medlem af Svenska Ingeniörsföreningen i Chicago, afreste i juni sistl. år (1912) härifrån till Stockholm för att bevista de Olympiska spelen. I medio af påföljande augusti erhöll nämnda förenings sekreterare ingeniör G. A. Åkerlind från honom ett bref. hvari han meddelade, att han var stadd på resa till Congo. Han hade ett par veckor förut genom Vattenbyggnadsbyrån i Stockholm fått anställning som ledare för en geografisk hydrografisk expedition genom Kasai-området i belgiska Congo. Expeditionen, som beräknas taga en tid af ett år, har till uppgift att undersöka vissa vattendrag i nämnda besittning. Expeditionen bekostas af Companie du Kasai, ett oerhördt rikt gummibolag, som har koncession på tillgodogörandet af detta områdes produkter.

Herr Tjäder meddelade vidare, att han erhöll denna ansvarsfulla plats tack vare den erfarenhet han förvärfvat i vildmarkerna i Arkansas, Tennessee och Texas, där han vistats ett års tid, sysselsatt med flodregleringar för Morgan Engineering Company, ett af Amerikas största civilingeniörsbolag.

Före sin resa till nämnda sydstater var han i ett par års tid bosatt i Chicago och var här anställd hos civilingeniörsfirman E. Rudolph Company samt deltog i regleringen af llinois-floden 1910. I denna stad förvärfvade den unge, sympatiske ingeniören ett stort antal vänner, som helt säkert glädja sig öfver att ett så stor förtroendeuppdrag lämnats honom och hvilka nu förvisso önska honom lycka och framgång på hans ansträngande och från faror långt ifrån fria färd.

Sitt intressana resebref har han adresserat till Ingeniörsföreningens sekreterare G. A. Åkerlind. Brefvet var åtföljdt af ett antal originalfotografier, tagna af ingeniör Tjäder själf. Dessa reproduceras här nedan.

<sup>\*</sup> Aftryck från Chicagotidningen "Gamla och Nya Hemlandet".

Ingeniör Tjäder skrifver som följer:

KAFUFU, C. K., den 26 mars 1913.

En ganska lång tid har nu förflutit sedan jag lofvade meddela mina upplefvelser här i vildmarken och orsaken är den, att jag velat samla material samt att jag väntat at någonting skulle hända — någonting hårresande — men förgäfves! Lifvet här för-



INGENJÖR JOHN E. TJÄDER

flyter lugnt och stilla och frånvaron af allt, som påminner om civilisation, gör sig ej vidare kännbar, när man en gång blifvit van vid "naturlifvet". Det är förvånansvärdt hur lätt man faller"! Men — till ämnet!

Åtta månader ha flytt sedan jan vände Europa ryggen. Intrycken från sjöresan ha något förbleknat, men dess intressan-

taste episoder kanske böra omnämnas. Trafiken mellan Antwerpen och Matadi, Congo, uppehålles af fyra ångare, bekvämt, ja, nästan luxuöst inredda. De hamnar som besökas erbjuda mycket sevärdt för européen, som för första gången skadar de underbara tropikerna. Reguliära uppehåll göras vid Dakar i Senegal: Comakry i Franska Guinea samt Grand Bassam pa Guldkusten. Dessuton passeras ekvatorn, hvilket är en anledning till mycket skämt. På denna speciella resa besökte vi äfven Las Palmas å Canarie-öarne. En särdels intressant plats och känd vinterkurort. På morgonen den 10:de dagen ombord fingo vi känning af resans mål. I stället för det klara gröna saltskum, som vi nära tre veckors tid sett vra och fräsa om fartygets bog, sågo vi nu att ångaren plöjde sin väg genom en gulbrun vätska. Det var Congo-floden, som kom oss till mötes - 200 mil ut till hafs. Tidigt följande morgon passerades Banana, en liten stad vid Congos mynning, och på eftermidd, kl. 5 affyrades ankomstskottet i den lilla hamnen vid Boma.

Boma är hufvudstaden i det Belgiska Congo och en rätt snygg plats. Gatorna äro försedda med cementtrottoarer, aflopp och andra civiliserade inrättningar. Elektrisk belysning, telefon, stora handelshus samt många kaféer — allt finns i Boma. För ordningens upprätthållande finns en kår svarta poliser i blaa uniformer och röda toppmössor.

Största delen af vår last var destinerad till Boma och vi lågo här i två dagar. Såsom representant för ett af de rikaste bolagen i Congo blef jag mottagen i audiens af guvernören. Det vänliga sätt på hvilket jag blef mottagen af den höga officeren samt hans underhållande konversation utgöra ett af mina bästa minnen från resan.

När lossandet af lasten var undanstökadt, lättades åter ankar och vi ångade vidare uppför Congo-floden och anlände efter 10 timmar till Maradi. Här stänges vägen af forsar och fall, och först vid Leopoldville blir Congo åter segelbar. En järnväg sammanbinder dessa två städer. Denne järnväg är ryktbar i många afseenden. Dess skapare är belgiske öfversten Thyss. Sträckan är 400 km. lång och banan slingrar sig fram i otaliga kurvor i den kuperade terrängen. Det tar två dagar att passera

<sup>&</sup>lt;sup>9</sup> En hvit man har satt lifvet till för hvarje kilometer, under byggandet, summa 400, samt tusentals svarta och importerade kinesiska arbetare. Järnvägen inbragte kung Leopold II och öfverste Thyss kolossala förmögenheter, de s. k. ''blodsmillionerna''.

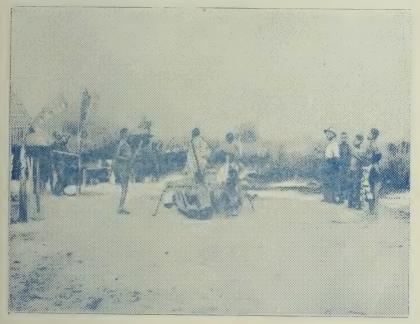
sträckan. Den första dagen arbetar sig lokomotivet uppför, alltjämt uppför, tills man når Thyssville. Här öfvernattas — man kör ej om nätterna! — och som några sofvagnar ej existera. tar man in på hotellet. Tio timmar ha åtgått att tillryggalägga halfva sträckan. Den senare hälften passeras på sju timmar, andra dagen, men nu bär det hela tiden utför — mot Congofloden och Stanley pool.

Från Leopoldville är en liftig trafik på floden. Man ser öfverallt belgiska, franska, tyska och portugisiska ångare — vanligen hjulångare — som bringa gummi, elfenben och andra produkter till järnvägens ändpunkt samt återvända med europeiska handelsvaror, proviant, krut och dylikt, till det inre. Trettio dagar kan man resa uppför strömmen till de stora sjöarna, och ett par ångare hålla ända till 250 ton.

En af bolagets ångare mötte mig i Leopoldville, och efter två dagars resa på Congo styrde vi in på Kasai-floden. Inkomna på denna stora vattenväg började resan bjuda på särdeles intressanta episoder. Stränderna vimlade af stora fåglar, tillhörande vadaresläktet. Tidt och tätt döko stora flodhästhufvuden upp och ofta förvanansvärdt nära angaren. Det erbjöds en utmärkt skottafla för mitt mausergevär, och mer än en fick bita i gräset - eller rättare vattnet. Här och där på sandbankarne såg man spår efter krokodiler som gassat sig i den heta solen. Negerkanoter gledo uppför och nedför floden, ljudlöst och snabbt. Stundom tränger urskogen fram till stränderna och i dess träd skymtar en och annan apa. En papegoja ger ett gällt skrik och en hvit ibis aftecknar sig skarpt mot den mörka bakgrunden. Öfver hela taflan ligger något mystiskt. Vid solnedgången förtöja vi vid stranden. Negerbesättningen skickas i land för att hämta ved för nästa dags resa. Supén dukas på däck. Mörkret faller så hastigt och ogenomträngligt, lamporna tändas och som en följd häraf infinna sig tusentals myggor och andra flygfän.

Efter fyra dagars resa anlända vi till Dima, Compagnie du Kasais säte i Afrika. Här finnes en gentil villa för "afrikanska" direktören, kontorsbyggnader, bostäder för tjänstemän, magasin, mekanisk verkstad, elektricitetsverk, båtvarf för bolagets 20 ångare, hamn etc. Min vistelse i Dima utsträckte sig till fem veckor och slutligen den 12 oktober gick jag ombord å en annan af bolagets ångare, som skulle föra mig upp för Kasai-floden samt dess biflod Lulua. Efter tolf dagar nådde vi Luebo, en plats vid Lulua och ändpunkten för trafiken på denna led. Här började resan öfver land och alla underbarheter från det inre af Congo skulle nu afslöjas!

Klockan 8 på morgonen var vår karavan i ordning i Lucbo. Detta den 28 oktober 1912. En brokig samling! Den enda lokalfärgen är svart — svarta kroppar sparsamt inhöljda i brokiga tygstycken. Två och två ordnades våra 80 bärare af sina äfvenledes svarta förmän, hvarje par om en börda, hvar och en bestående af en koffert, låda, säng, badkar, vindamejeanner, tält o. s. v. — allt hvad man kan tänka sig höra till ett städadt ungkarlshem i Afrikas urskogar. Mitt ressällskap är kapten Van Haute, som äfven fungerar som assistant på min expedition. Två hvita män — alltså två hängmattor att resa i, tolf bärare för



Negerdans i byn Godeankoj

hvarje. Arma själar, som få knoga och bära oss i hettan, medan vi halfsofvo under ett parasoll! Men så få de också åtskilliga koppar salt för arbetet. Salt är infödingens mynt. Guld och silfver är intet, men groft salt eller ett stycke tyg är allt. Äfven andra saker ha stort handelsvärde, som krut t. ex. För en bjällra af mässing kan man få en höna.

Kl. 8 bar det, som sagdt, i väg med bärarne. Vi hade planerat en tre timmars dag endast, för att fa godt logi i en af de större byarna, och gjorde oss därför ingen brådska. Afskedsbägaren väntade hos bolagets chef på platsen och snart sutto vi bänkade på dennes rymliga veranda. Bolaget har Kasai-distriktet cirka

350 faktorier eller gummiposter, hvar och en under en eller två agenter med en eller två assistenter, allt efter storleken. Luebo är en af de största posterna, bolaget har här två agenter och tre assistenter. Dessförutom finns där en statens militärpost, en katolsk missionsstation samt en amerikansk presbyteriansk mission. Inalles omkring tre hvita, hvilket är ett ansenligt antal i dessa trakter. Vid 10-tiden bröto vi upp och placerade oss i våra hängmattor för att, som det så vackert heter, gå okända öden till mötes!

En reshängmatta är upphängd under en tjock bambustång och man ligger rätt bekvämt i den. En neger i hvar ända på stången, och så bär det af i jämn lunk. De tio reservnegrerna fylkade sig kring hängmattan och med skrik och sång uppmuntrade bärarna. Så snart de två äro trötta, springer ett nytt par fram och aflöser detta.

Åtskilliga byar passerades och dess invånare kommo alltid "man ur huse" för att tillropa oss sitt: "Mois, muka lenge", hvilket betyder: "Långt lif, höfding", och är den allmänna hälsningsfrasen Alla hvita äro "höfdingar". Barnen i synnerhet äro särdeles kvicka att komma så nära hängmattan som möjligt för att säga sitt "moia". Mestadels äro de nakna, d. v. s. med undantag af de obligatoriska dekorationerna; ett snöre omkring midjan, en ring om vristen eller handleden. En liten knatting på omkring 115 år hade förutom snöret kring midjan äfven den högst värdefulla dekorationen — en liten ringklocka, som dinglade och pinglade på en sådan plats, att den ovillkorligen måste vara i vägen om han ville sätta sig. Vid 1-tiden gjorde vi halt i byn Kalemba. Här liksom i de flesta byar på vägen finnes ett särskildt hus för resande hvita. Huset är en jordhydda af infödingarnes typ med grästak. Det är dock stort och rymligt och man sofver rätt bekvämt där. Genast efter vår ankomst åto vi en välsmakande lunch. På eftermiddagen hälsade vi på hos höfdingen och fingo tillstånd att köpa en get. Utan höfdingens medgifvande kan man inte köpa en nypa tobak från byns invånare. Geten kostade 4 famnar tyg - billigt bomullstyg -, och snart hade kocken — eller rättare kockarne, tv vi hade två — slaktat henne, styckat henne och placerat köttet i grytan. Våra tre upppassare ordnade ett smakfullt bord, och jag kunde med glädje konstatera att vår första måltid på vandrarestråten öfverträffat mina djärfvaste förhoppningar. Vi åto under bar himmel och njöto af svalkan, som alltid infinner sig efter solnedgången. Kl. 1/59 voro vi i säng och 5 minuter efter sedan ljuset var släckt började råttorna komma fram ur grästaket och nedför väggarna för at se, hvad slags främmande det var denna gång. Jag vet dock ej hvad resultat deras undersökning ledde till, ty oartigt nog somnade jag så godt som genast.

Följande morgon hade vi en hastig frukost vid 6-tiden, packade ihop de öppnade effekterna och öfverlämnade dem till bärarne samt sutto i hängmattan kl. 127. Dagen lofvade att bli otreflig, ty tunga moln hängde öfver våra hufvuden och åskan mullrade hotfullt. Det dröjde ej länge förrän stora droppar började falla. Vi drogo på regnrockarna och spände upp paraplyerna, under det att de få negrerna, som hade skjortor på sig, togo af dessa och behöllo endast det lilla skynket de bära kring midjan. De



Vid lägret

veta att det är skönt att ha en torr skjorta att ta på, när regnet slutar!

Landet mellan Luebo och bolagets post Tahitadi är ganska högt, men Läckar och mindre floder ha skurit djupa dalar i platan och de äro tätt besvärliga att gå öfver, ty sidorna äro vanligtvis mycket branta. Det är 22 sådana dalar på vår väg och nöjet att klättra utför och uppför de branta sidorna är minimalt — i synnerhet när regnet gör marken slipprig. Vid ½10-tiden bröt tornadon löst med sin fulla kraft och regnet öste ned så som det endast kan i tropikerna. Blixt följde på blixt och åskan skrällde oafbrutet med oerhörd styrka. Lyckligtvis funno vi en liten

by på vägen och voro mycket glada att få krypa in i en smut ig och rökig negerkoja. Icke förrän vid 1-tiden kunde vi fortsätta vår färd och två timmar senare nådde vi den by, i hvilken vi beslutat öfvernatta. Ungefär på detta sätt fortgick var resa och på elfte dagen ankommo vi till bolagets post i Bakéte, hvarest jag började de undersökningar, för hvilka jag kommit hit till Congo.

I Bakéte förfärdigade jag en stor kanot, 12 m. lang, för undersökningarna å floden. Ett stort träd nedhöggs, urbolkades och tillformades på infödingarnes vis. Kanoten har gjort oss ovärderlig nytta. Medelst densamma hafva vi varit i stånd att transportera närmare ett ton af vårt bagage på floden. Den 20 dec. sjösattes kanoten och dagen efter flyttade vi till en liten negerby. Bumba-Bumbo. Här tillbragtes julen, hvilken förflöt som alla andra dagar. Allt eftersom arbetet fortskridit ha vi trängt allt längre söderut längs floden, från by till by Angenäma afbrott ha ei saknats. Sålunda har jag antecknat från den 3 jan, följande: "Tidigt i morse väckte min uppassare mig med den underrättelsen, att några infödingar upptäckt en sofvande flodhäst i det manshöga gräset på flodstranden. Det tog ej många minuter att få på kläderna, en näfve patroner i fickan, geväret och i väg. Kaptenen kom efter inom en minut med tre gevär och min upppassare, Kantjo, följde för ovanlighetens skull sina instruktioner och kom traskande med fagelbössan. Tva infödingar visade vägen. Sedan vi följt flodstranden en stund, stötte vi på en liten bäck, som vi måste öfver. Till min förvåning hoppade en at negrerna ned ibland sjögräset, hvarest vattnet stod honom till knäna, trefyade med händerna ett ögonblick under vattenytan och lyfte plötsligt upp en kanot ur vattnet, vände upp och ned på den och hade den lilla farkosten flytande på en half minut.

Marschen fortsattes på den andra sidan bäcken. Det var ett nöje at se infödingarne smyga efter flodstranden med ljudlösa steg. Efter några minuters nervspännande marsch stannade plötsligt ledaren och gaf tecken att han fått sikte på djuret. Jag smög mig fram med spänd hane och efter mig kom kaptenen. Vi kommo ej en sckund för tidigt! Besten hade vaknat och gitvi sig ned i vattnet — endast hufvudet syntes ofvan ytan — han var tydligen färdig att hvilken sekund som helst gifva sig af. Samtidigt brakade de båda skotten och så snart röken skingrat sig, såg jag endast kolossala ringsvall, hvarest besten försvunnit. Negrerna, som hafva en underbar synförmåga, hade märkt, att båda skotten träffat i hjässan. Vi sände genast några män i kanoten för att hemföra bytet, men de återvände utan resultat efter

tv: timmars sökande. Antagligen hade ögonblicklig döl inträfat och i så fall kunde vi ej vänta att kroppen skulle dyka upp förrän efter omkring 24 timmar.

De stammar, som bo här nära Lulua-floden, äro ansedda för att vara de vildaste som för närvarande finnas i Congo. Staten har förgäfves sökt eivilisera dem, stäfja slafhandeln och människeätandet, som florerar i hög grad, namt i drifva skatter. Åtskilliga hvita ha blifvit dödade och många negerseldater ha stupat här de senaste åren. Att det under sådana förhållanden



Vid statsposten M:a Kapanga

är med risk förenadt att genemtränga dessa trakter, är lätt förstådt. Jag var af guvernören erbjuden eskert, men afsade mig densamma på den grund, att soldaternas uppträdande i dessa trakter alltid föranleda skärmytslingar. Det har också lyckats oss att genomtränga dessa illa beryktade trakter utan allvarliga äfventyr. En liten upplefvelse kanske är värd att omnämnas. Den 25 jan, är antecknad: "——— Efter undersökningarnas afslutande för dagen, beslöto vi anträda återfärden till lägret öfver land, i stället för at följa kanoten. En infödingen marschetade raskt och jag följde honom hack i häl, lämnande ett afst ind af omkring 200 m. mellan mig och kaptenen, hvilken följdes af

bössbäraren. Helt oförmodadt stötte vi på en by och mitt oväntade inträde förorsakade en viss förvirring. Omkring 20 man sprunge upp från sin sittande ställning kring eldarna och fattade sina ffintlåsgevär. Jag blef förbluffad öfver detta mottagande och stannade helt plötsligt med handen om revolvern i fickan-Min vägvisare tillropade dem att sänka gevären, och jag började se mig om för att utröna orsaken till deras beteende, och upptäckte, bakom en hydda, en man, bunden till händer och fötter. Så snart jag upptäckt honom sprang byns höfding fram och började lossa fångens band under liftiga och obegripliga förklaringar. Kaptenen anlände i detsamma och med tillhjälp af våra mäns tolkning fingo vi reda på af fången, att han kommit till byn med en massa höns för att köpa en hustru, men invånarne hade tagit hans höns och gjort honom till fånge. Hvad hans öde skulle blifvit, om vi ej ingripit, är ej svårt att säga. Antingen hade han fått fungera som hufvudrätten vid en festmåltid eller också hade han blifvit såld som slaf till någon annan stam. Sådant är förhållandet stammarna emellan. Vi gifvo bofvarne en skarp tillrättavisning samt lofvade att rapportera saken till närmaste militärpost, togo mannen med oss och aftågade, åtföljda af infödingarnes allt annat än vänliga blickar Dagen därpå sände vi den f. d. fången till hans by, och hans tacksamhet kan man lätt tänka sig."

Jag vet ej om denna lilla skildring kan hafva något af intresse eller ej. Tyvärr kan jag ej, utan bolagets eller statens medgifvande, yttra mig om resultatet af mina undersökningar eller den tekniska sidan af expeditionen. För att i någon mån komplettera "berättelsen" bringar jag några fotografier, som jag tagit här. — Om två månader är regntiden slut och jag betäknar då befinna mig cirka 200 km, längre söderut. Här vänder jag kosan mot norr och i oktober eller november, kanske förr, hoppas jag nå kusten i och för återresan till Europa. Kanske jag längre fram har saker af större intresse att berätta — i så fall låter jag naturligtvis höra af mig.

Till slut vill jag nämna, att hvarje litet ord eller hälsning från Eder samt öfriga medlemmar af S. I.-F. mottagas med största tacksamhet. Trots det att jag befinner mig så långt från Chicago är jag dock i hög grad intresserad af föreningens och dess medlemmars öden, och jag ber om min hälsning till dem, i hvars minne jag fortfarande existerar. Naturligtvis vill jag fortfarande uppehålla mitt medlemskap. Nyckeln till klubbrummet har jag fortfarande i min ägo och den är nog det enda exemplaret, som funnit sin väg till hjärtat af Afrika.

# Constitution and By-Laws

and

# List of Members

for the

Swedish Engineers' Society of Chicago

Founded October 10, 1908
Incorporated June 25, 1912

PRESS OF
JACOBSON PRINTING CO,
300 W, GRAND AVE.
CHICAGO

HALF TONES MADE BY THE CALUMET ENGRAVING COMPANY 508 S. DEARBORN ST. CHICAGO

ROBERT HVITFELDT

# The Swedish Engineers' Society of Chicago

1916

#### @fficers

JOHN BRUNNER, President CARL SÄVE, Secretary C. A. BOLIN, Vice-President AXEL AKERS, Treasurer

# Board of Directors

ALBIN P. RISSLER JOHN ERICSON C. G. AXELL

G. A. K. BJURSTROM

PETER PARKE

AND THE OFFICERS

# Lecture Committee

CLARENCE ONGMAN, Chairman

JOHN ERICSON

C. E. CARSON

### Library Committee

ALEF. CEDEROTH, Chairman

H. N. PARSONS

HELGE NASSEN

# House Committee

F. SEABERG, Chairman

SVEN HOLMES

ERLAND SÄFSTRÖM

# Membership Committee

C. G. AXELL, Chairman

ALFONS AHNGER

G. A. AKERLIND

# Publication Committee

C. A. BOLIN, Chairman

C. G. AXELL C. ONGMAN ALEF CEDEROTH

F. SEABERG

CARL SÄVE

# Past Presidents

1908HENRY NYBERG1909HENRY NYBERG1910G. A. M. LILJENCRANTZ1911DR. ERNST J. BERG1912JOHN ERICSON1913RENRY ERICSSON1914JOHN ERICSON1915ALBIN P. RISSLER

#### OFFICE AND LIBRARY ROOM

619 City Hall Square Building, 139 North Clark Street Chicago, Illinois

# **CONSTITUTION** and BY-LAWS

OF

# The Swedish Engineers' Society of Chicago

ADOPTED NOVEMBER 15th, 1913

#### ARTICLE I.

### Name and Object of the Society.

Section 1. The name of the Society shall be "The Swedish Engineers' Society of Chicago."

Sec. 2. The object of the Society shall be to promote knowledge, advancement and co-operation among the technical men of Swedish descent engaged in engineering and industrial operations in Chicago and vicinity.

# ARTICLE II.

# Membership.

Section 1. The members shall be divided into five classes: Honorary, Life, Active, Corresponding and Associate.

Sec. 2. **Qualifications**. To become a member it is required to be of Swedish descent and to meet the requirements as set forth below.

Sec. 3. **Honorary Member** shall be a man of prominence in the sciences or industries or who has made himself deserving of the Society's highest regard.

Sec. 4. **A Life Member** shall be an active or corresponding member of the Society who has to the treasury at one time paid the sum of Fifty (50) Dollars. Such life member shall enjoy all privileges of an active member.

Sec. 5. **An Active Member** shall be one possessing technical education, from some school or college, or shall be one who, through self-tuition and ability, has worked himself up to a position which requires engineering knowledge.

Sec. 6. A Corresponding Member shall be residing at a distance of at least forty (40) miles from the City of Chicago. The requirements shall be the same as for an active member. The transfer of an active member to this group shall be made semi-annually.

Sec. 7. **An Associate Member** shall be one who cannot qualify as active or corresponding, but who is interested in the Society's activities and who may, by his position in the community, be expected to aid the aims of the Society.

#### ARTICLE III.

# Admissions and Expulsions.

- Section 1. Application for membership shall be made on blank, the form of which is determined by the Board of Directors, and shall contain information on the several points previously enumerated and a declaration that the applicant will abide with the rules and regulations of the Society. The applicant shall refer to at least two members who are acquainted with the applicant and can certify to his desirability as a member.
- Sec. 2. The application must be accompanied by an admission fee of two (2) dollars and shall be submitted to the Secretary, who shall post the name of the candidate and proposers on the bulletin board for at least one week. The Board of Directors shall then decide whether the applicant is acceptable or not, and shall determine to which class he may be referred. If the applicant is not accepted the admission fee shall be refunded.
- Sec. 3. An honorary member shall be proposed in writing, which shall give the reasons for the proposal and shall be signed by at least ten active members in good standing. He shall be elected only by unanimous vote of the entire Board of Directors, after the name of such candidate has been posted in the regular way. The voting to be done by letter ballot if necessary.
- Sec. 4. Membership of any person shall date from the date of his election. A rejected applicant may renew his application for membership at any time after the expiration of one year from the date of the ballot rejecting his previous application.
- Sec. 5. A member of the Society may resign his membership by a written communication to the Secretary, who shall present the same to the Board of Directors, who shall accept his resignation, if all his dues have been paid.
- Sec. 6. Upon a written request of ten or more active members in good standing, giving cause therefore, a member of the Society may be expelled by the Board of Directors, if there appears to be sufficient reason. The accused member shall first be advised of the charges against him and given an opportunity for defense. If expulsion is found justified, the member shall be notified, but unnecessary publicity should be avoided.

#### ARTICLE IV.

#### Dues.

Section 1. The yearly dues for an active member shall be six (6) dollars. The yearly dues for an active member shall be six (6) dollars. The yearly dues for a corresponding member shall be two (2) dollars if residing in the United States or Canada, and shall be one dollar if residing in other countries. The yearly dues for an associate member residing within forty (40) miles of the City of Chicago shall be four (4) dollars. The yearly dues for an associate member residing forty (40) miles or more from the City of Chicago shall be two (2) dollars. All dues shall be paid in advance. An honorary member shall be exempt from payment of dues.

Sec. 2. Any person whose dues are more than six months in arrears shall be notified by the Secretary or Treasurer. Should his dues become nine (9) months in arrears, he shall lose his right to vote and to receive the Society's publications, and should his dues become one year in arrears, he shall forfeit his connection with the Society. The Board of Directors, however, may for cause deemed sufficient, extend the time for payment and may relieve any member from paying part or all of his dues when circumstances or the interests of the Society are deemed to justify such action.

#### ARTICLE V.

#### Officers.

- Section 1. The officers of the Society shall be as follows:
- Sec. 2. A President, who shall preside at the meetings and perform the duties pertaining to a presiding officer. He shall also be the chairman ex-officio of any committee he may appoint, and whose meetings he may attend.
- Sec. 3. A Vice President, who shall, in the absence of the President, perform all duties required of that officer.
- Sec. 4. A Secretary, who shall attend to the official correspondence of the Society, receive applications for membership and keep records of the meetings and all official transactions,
- Sec. 5. A Treasurer, who shall, under direction and approval of the Board of Directors, handle all funds of the Society, collect dues and pay bills with check on a Chicago bank and keep books

of all such transactions, enabling the Board of Directors at any time to determine the Society's financial standing. The Treasurer shall be bonded in a surety company at the expense of the Society.

- Sec. 6. The Board of Directors shall consist of the officers and five additional active members elected as stated in Article VI.
- Sec. 7. The President, as chairman of the Board of Directors, shall call meetings of the Board whenever deemed desirable, and shall together with the Board establish such rules and regulations for the Society's headquarters, when such exist, as they deem proper, and shall with the Board exercise a general supervision over the Society's affairs. At the request of three members of the Board of Directors an extra meeting may be called.
- Sec. 8. Standing Committees. The incoming President shall, at the annual meeting, appoint a Committee on Lectures, a House Committee and a Library Committee. The Committee on Lectures shall consist of three members, whose duties it shall be to arrange for the reading of papers, to lead discussions and to otherwise contribute in making the meetings interesting. The House Committee shall consist of three members. This committee shall, under supervision of the Board of Directors, have charge of the Society's property, arrange for quarters and entertainments, etc., but must not incur greater expenses to the Society than given by written authority from the Board of Directors. The Library Committee shall consist of three members. This committee shall have supervision over the Society's library, receive books, magazines and pamphlets, shall list same and shall submit to the Board of Directors estimates of expenses desirable to extend and maintain the library.
- Sec. 9. Special Committees and the Appropriation of Money. A proposition to appoint such a committee or to appropriate money shall be presented at a regular meeting of the Society, and, if sustained, the Board of Directors shall take the proposition under advisement and decide whether the object is justified and if the necessary expenses can be met by the Society. In such case, the Board will select a committee and give it instructions as to the scope of its work and the amount of money available for the purpose. A two-third majority of the Board shall be required to decide, the votes to be cast by letter ballot if necessary.

#### ARTICLE VI.

#### Nomination and Election of Officers.

Section 1. The President, Vice President, Secretary, Treasurer and the Directors shall be elected from the active or life members, in the month of December annually. The officers shall hold office for one year and the directors for two years. Three directors shall be elected in the even years and two in odd years.

The term of office of each officer shall begin at the close of the annual meeting in January for the year for which he was elected, and shall continue for the period above named or until a successor is duly elected. Should any officer or member of the Board of Directors be unable to serve, such vacancy shall be filled by a life or active member elected by the Board of Directors.

- Sec. 2. There shall be a Nominating Committee composed of six (6) members of the Society, three of which shall be appointed by the Board of Directors and three of which shall be elected annually when the officers of the Society are elected. This committee shall elect their own chairman. It shall be the duty of this committee to meet in the early part of November of each year and nominate the candidates for officers and directors named in Article V.
- Sec. 3. The three elective members of the nominating committee shall be nominated and elected at the regular December meeting of the Society.
- Sec. 4. The Secretary shall mail, on or before the last Thursday in November of each year, to each member entitled to vote, a ballot containing the names of the nominated candidates for the several offices falling vacant. Under the names of the nominees for each office so printed there shall be provided a space for the use of the voter if he desires to substitute another name. The voter shall enclose said ballot in an envelope and seal the same. He shall then enclose the sealed envelope in a second envelope marked "Ballot," seal the same, and shall then write his name thereon for identification. The ballot thus prepared and enclosed shall be mailed or delivered unopened to the Secretary of the Society. The Secretary or Treasurer shall certify to the competency and signature of all voters. A ballot without the autographic endorsement of the voter written on the outside envelope shall be marked "Defective."

Sec. 5. All ballots shall be transmitted by the Secretary unopened to the presiding officer of the December meeting. The presiding officer shall then declare the election closed and shall appoint three tellers who shall first destroy all the defective ballots unopened. They shall then open and destroy the endorsed outer envelopes marked "Ballot," and then open the inner envelope and count the votes. The opening of both the outer and inner envelopes as well as the counting of the votes shall be done in open meeting after the election is closed. A ballot which contains more names than there are offices to be filled is thereby made "Defective," and shall be rejected by the tellers. tellers shall certify the results of the voting to the presiding officer, who shall then announce the candidates having the greatest number of votes for their respective offices and declare them elected for the ensuing year. A tie vote shall be decided through revoting by the voters present.

Sec. 6. Questions of vital interest to the policies and existence of the Society, shall be submitted in writing at a regular meeting of the Society, and may be, by a majority vote of the members present at such meeting, ordered to be presented for a special ballot to be cast at the next regular December meeting. This ballot shall briefly state the pro and con of the question. "Yes" or "No" should be voted and the ballot enclosed in the same envelope as that containing the official ballot. A two-third majority of the votes cast shall be necessary to carry the question.

#### ARTICLE VII.

# Meetings.

Section 1. The regular meeting of the Society shall be held each month at such hour and at such place as may be determined upon. Ten active members in good standing shall constitute a quorum for transaction of ordinary business, with the limitations as stated in Art. V, Sec. 9, but questions of vital importance to the Society shall be submitted to letter ballot as described in Article VI, Section 6.

Extra meetings may be called by the President on his own initiative or if petitioned by at least ten active members in good standing, who shall sign such petition and state the object of the meeting. At such extra meeting only such business shall be transacted as stated in the notice to assemble.

- Sec. 2. The annual meeting shall be the first regular meeting in January.
- Sec. 3. Members have the privilege to invite friends to the meetings.
  - Sec. 4. "Robert's Rules of Order" to govern.

#### ARTICLE VIII.

# Permanent Funds.

The Commonwealth Edison first mortgage 5% gold bond No. 18095 of one thousand dollars par value and maturing in 1943 shall be held by the Treasurer of the Society, and only the interest thereof shall be used for current expenses. To this permanent fund shall be added the dues for life membership and such sums as the board of directors from time to time may decide to add. This permanent fund shall not be drawn upon unless decided upon in the following manner: The proposition shall be presented in writing at a regular meeting at least three months before the annual election, and may, by a majority vote of the members present at such meeting, be ordered to be presented for a special ballot to be cast at the next regular December meeting. This ballot shall briefly state the pro and con of the proposition. A two-third majority of the votes cast shall be necessary to carry the proposition.

#### ARTICLE IX.

#### Amendments.

Proposed amendments to this constitution must be reduced to writing and signed by at least ten active members in good standing, and shall be submitted to the Board of Directors, who shall have the petition with the names of the petitioners and the proposed amendment printed with the call for a regular meeting of the Society. Should such a meeting by a two-thirds majority vote recommend the amendment as proposed or as amended by the meeting, then the question shall be submitted to a "Special Ballot." Such ballot to contain brief statement of the reasons for the change pro and con. A two-thirds majority of the votes cast shall be necessary to carry the amendment.

Amendments so adopted shall take effect immediately after the next annual meeting in January.

### ARTICLE X.

# Dissolution of the Society.

- Section 1. Should the number of active members fall below twenty, a proposition may be entertained to disband, but this must be made in writing and addressed to the Board of Directors. An extra meeting shall then be called not earlier than six (6) days after the issuance of such notice, and no other business shall be transacted at such meeting.
- Sec. 2. Should the meeting so held by a two-thirds majority decide on dissolution, then the question shall be submitted to all voting members by letter ballot and a two-thirds vote of all active and life members shall be necessary for the dissolution of the Society.
- Sec. 3. A history of the Society shall then be written, and, together with documents, books, correspondence and the gavel, or other relics and valuables the Society may possess, be deposited with the Swedish Historical Society of America, or, if this Society should not exist at the time of the dissolution or not be able to take care of the property turned over, then the Swedish Societies' Old People's Home Association of Cook County, Illinois, should be requested to take into safe-keeping all the belongings until another Swedish Engineers' Society may be formed in the City of Chicago.
- Sec. 4. Should any funds belonging to the Society be in existence at the time of dissolution, such funds and money shall be turned over to the party taking custody of the Society's property as a compensation for services to be rendered.

### ARTICLE XII.

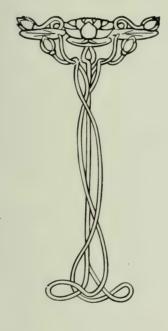
# Order of Business.

The order of business shall be as follows:

- 1. Call to order by the President.
- 2. Reading of the minutes.
- 3. Report of Board of Directors.
- 4. Reports of standing and special committees.
- 5. Unfinished business.
- 6. New business.
- 7. Reading of papers and discussion of same.
- 8. Election of officers (at the December meeting).
- 9. Adjournment.



# List of Members







JOHN BRUNNER
President of The Swedish Engineers' Society of Chicago 1916



Still Signand.

LILJENCRANTZ, G. A. M.

Charter Member, Honorary Member, 1908.

President 1910.

Asst. Eng., U. S. Engineer Offico, Chicago, Ill. Res., 627 Groveland Park, Chicago, Ill.



AlCarlson

# CARLSON, DR. ANTON JULIUS

Honorary Member 1909.

Professor of Physiology, University of Chicago. Res., 5228 Greenwood Ave., Chicago, Ill.



### ABRAHAMSON, O. E. J.

Active Member 1913.

Chemist with Universal Portland Cement Co., Buffington, Ind.

Res., 508 Englewood Ave., Chicago, Ill.



# ACKANDER, ALBERT B.

Charter Member, Corresp. Member, 1908. Res., Ocean Springs, Miss.



### ADLER, NILS

Active Member, 1914.

With Crane Company.

Res., 1548 N. Kedzie Ave., Chicago, Ill.



### AHLBERG, G. A. F.

Corresponding Member, 1910.

With Ahlberg Kerosene Carborator Company, 2539 Oliver Building, Pittsburgh, Pa.



### AHNGER, ALFONS

Active Member, 1912.

With Indiana Steel Co., Gary, Ind.

Res., 6426 Vernon Ave., Chicago, Ill.



#### AKERLIND, G. A.

Charter Member, Life Member, 1908.

Secretary, 1908-09-10-11-12-13-15.

Insp. Eng'r, Bridge Dept., City Hall, Chicago, Ill.

Res., 536 Rush St., Chicago, Ill.



### AKERLIND, J. AD.

Corresponding Member, 1909. Constructing Engineer. Res, Hedemora, Sweden.



### AKERS, AXEL

Active Member, 1913.

Treasurer, 1915, 1916.

Mechanical Engineer, City Hall, Chicago, Ill.
Res., 7357 Vernon Ave., Chicago, Ill.



### ALINDER, HENRY

Corresponding Member, 1910. With Allis-Chalmers Company. Res., 598 34th St., Milwaukee, Wis.



# ALSTERBERG, GUSTAF

Active Member, 1914.

Tester, Universal Portland Cement Co.,
Buffington, Ind.
Res., 9953 Ave. M., East Side, South Chicago, Ill.



### ALZEN, CARL A.

Charter Member, Active Member, 108.

Fire Protection Engineer, "Royal" of Liverpool, Chicago, Ill.

Res., 5240 Kenmore Ave., Chicago, Ill.



#### ANDERSON, CARL A.

Active Member, 1915.

President Reliance Elevator Company.
Res., 1503 Lake Ave., Wilmette, Ill.



### ANDERSON, CARL F.

Active Member, 1913.

Manufacturer.

Res., 1650 S. Millard Ave., Chicago, Ill.



# ANDERSON, C. B.

Active Member, 1913.

With Western Electric Company, Hawthorne, Ill. Res., 6147 Champlain Ave., Chicago, Ill.



### ANDERSON, H. A.

Active Member, 1908.

With Central Iron Works, Chicago, Ill. Res., 342 W. Chicago Ave., Chicago, Ill.



# ANDERSON, JOHN F.

Corresponding Member, 1912.

U. S. Vice Consul, Copenhagen, Denmark. Res., Båstad, Sweden.



### AUSTROM, C. A.

Corresponding Member, 1914.

Assistant Chief Engineer, The Travelers Insurance Company of Hartford, Conn.
Res., Hartford, Conn.



# AXEL, SWEN

Corresponding Member, 1912. Kungsholmsgatan 30, Stockholm, Sweden.



### AXELL, C. G.

Active Member, 1909.

Vice President, 1911. Secretary, 1914.

Engr. of Elec. Design, Commonwealth Edison Co., Chicago, Ill.

Res., 3732 N. Racine Ave., Chicago, Ill.



### BALCHER, MARTEN

Charter Member, Active Member, 1908. With Blomfeldt & Rapp Co., Chicago, Ill. Res., 1422 Belle Plaine Ave., Chicago, Ill.



# BERG, ERNST J., Sc. D.

Life Member, 1910.

President, 1911.

Professor of Electrical Engineering,
Union College, Schenectady, N. Y.



### BERG, GUSTAV

Corresponding Member, 1909. General Manager "Lux" Company, Stockholm, Sweden.



### BERGEN, THEODORE A.

Corresponding Member, 1913. Chief Electrical Engineer, A.-B. Industribyrån, Västra Trädgårdsgatan 7, Stockholm, Sweden.



# BERGENDORF, C.

Corresponding Member, 1912.

Superintendent, Rock Island Plow Company, Rock Island, Ill.

Res., 850 22nd St., Rock Island, Ill.



# BERGGREN, A. E.

Corresponding Member, 1910.

Instructor in Mech. Eng., Wisconsin University, Madison, Wis.

Res., 221 Engineering Building, Madison, Wis.



# BERGLAND, ERIC, MAJOR

Corresponding Member, 1909.

Major Corps of Engineers, U. S. A., Retired.
P. O. Box 30, Baltimore, Md.



### BERGQUIST, CARL

Active Member, 1909.

Chemist, Corn Products Refining Co., Chicago, Ill.
Res., 15 W. Walton Place, Chicago, Ill.



### BERGQUIST, J. G.

Charter Member, Life Member, 1908. Consulting Engineer. Res., Glen Head, Long Island, N. Y.



### BIRCH, CHARLES H.

Active Member, 1912. With H. W .Caldwell & Son, Chicago, Ill. Res., 3253 Southport Ave., Chicago, Ill.



### BIRKLAND, EMIL E.

Active Member, 1909.

With Crane Company, Chicago, Ill.
Res., 1417 N. California Ave., Chicago, Ill.



### BJURSTROM, K. GUSTAF A.

Charter Member, Active Member, 1908. Treasurer, 1911. Asst. Chief Loco. Draftsman, C. & N.-W. Ry. Co., Chicago, Ill. Res., 1961 Winona Ave., Chicago, Ill.



### BJÖRKSTEDT, WILLIAM

Corresponding Member, 1910. Works Mgr., Stavanger Elektro-Staalverk, Norway.



### BJÖRNBOM, T.

Corresponding Member, 1912. With Luth & Rosen's Elec. A.-B., Stockholm. Res., Högbergsgatan 54, Stockholm, Sweden.



#### BLOMFELDT, P. AXEL

Active Member, 1912.

Blomfeldt & Rapp Co., Manufacturers, Chicago.
Res., 6523 Greenview Ave., Chicago, Ill.



#### BOLIN, C. A.

Active Member, 1908.

Treasurer, 1913-1914. Vice President, 1916.

Eng. Dept., Western Electric Co., Hawthorne, Ill.

Res., 3134 Wilson Ave., Chicago, Ill.



### BOMB, KARL

Corresponding Member, 1910. With H. Koppers Co., Pittsburgh, Pa. Res., 6109 Alder St., Pittsburgh, Pa.



### BORG, FRED G.

Active Member, 1910.

Engineer of Shops, Chicago Surface Lines.
Res., 6943 Eberhardt Ave., Chicago, Ill.



### BORGMAN, OSCAR J.

Active Member, 1916.

Architectural Draftsman, Sargent & Lundy, Engrs. Res., 4017 N. Paulina St., Chicago, Ill.



### BROBERG, H. A.

Active Member, 1910.

Const. Engr., Carter White Lead Co., Chicago, Ill. Res., Hotel Del Prado, Chicago, Ill.



#### BRUNNER, JOHN

Charter Member, Active Member, 1908.

President, 1916.

Asst. Insp. Engr., Illinois Steel Co., Chicago, Ill. Res., 627 Dartmouth Place, Evanston, Ill.



#### BRÖMS, C. O. J.

Corresponding Member, 1913.

Ingeniör, Sandvikens Jernverks A.-B., Sandviken, Sweden.



#### BURKLUND, OSCAR

Active Member, 1915.

General Contractor.

Res., 929 N. Menard Ave., Chicago, Ill.



### CARLSON, ANDROV

Active Member, 1910.

Manufacturer.

Res., 6030 Sheridan Road, Chicago, Ill.



# CARLSON, CARL THOMAS

Corresponding Member, 1912.

With Springfield Boiler Works, Springfield, Ill. Res., 843 S. 5th St., Springfield, Ill.



#### CARLSTEDT, HARALD

Corresponding Member, 1910.

With Wm. Wharton Jr. & Co., Philadelphia, Pa. Res., 312 South 52nd St., Philadelphia, Pa.



### CARSON, C. E.

Active Member, 1909.

Vice President, 1914.

General Contractor.

Res., 928 Argyle Ave., Chicago, Ill.



### CEDERBLOM, RAGNAR

Active Member, 1912.

With Chas. G. Atkins, Consulting Engineers.

Res., 7915 Coles Ave., Chicago, Ill.



## CEDERBORG, G. V.

Corresponding Member, 1910.

A.-B. Svenska Sockerfabriken, Arlöf, Sweden.



### CEDEROTH, ALEF

Active Member, 1913.

Asst. Div. Engineer,
Great Lakes Dredge & Dock Co., Chicago, Ill.
Res., 4151 Greenview Ave., Chicago, Ill.



### COLGREN, A. F.

Charter Member, Active Member, 1908. Manufacturer. Res., 233 W. 61st St., Chicago, Ill.



# CRONQUIST, G. W:SON

Corresponding Member, 1913. Editor of the Trade Journal "Tegel," Torekow, Sweden.



# DAHLBERG, GUSTAVE

Active Member, 1915.

Tool Designer, Stewart-Warner Speedometer Corporation, Chicago, Ill.

Res., 5956 Byron St., Chicago, Ill.



### DAHLIN, ERNST

Corresponding Member, 1910. Chemist, Tidafors Sulfitfabrik, Sandhem. Res., Tidafors, Sandhem, Sweden.



### DEDERING, HELMER

Active Member, 1912.

Eng. Dept., Commonwealth Edison Co., Chicago. Res., 5645 S. Sangamon St., Chicago, Ill.



### DEHLIN, MARTIN

Active Member, 1910.

With Western Steel Car & Foundry Co.,
Hegewisch, Ill.
Res., 13328 Burley Ave., Hegewisch, Ill.



### DILLNER, OLOF I.

Corresponding Member, 1915.
Chief Draftsman, Interstate Contr. & Supply Co., St. Louis, Mo.
4570 Oakland Ave., St. Louis, Mo.



### DEVIN, KLAS LUDVIG

Corresponding Member, 1910. With American Bridge Company, Pittsburgh, Pa. P. O. Box 1556, Pittsburgh, Pa.



#### DUNER, JOHN C.

Active Member, 1910.

Manufacturer, 101 S. Clinton St., Chicago, Ill.

Res., Wheaton, Ill.



#### EDLUND, K. EDW.

Corresponding Member, 1912. With Oxelösunds Järnverk, Sweden. Res., Oxelösund, Sweden.



#### ELQUIST, P. A.

Corresponding Member, 1916.

Consulting Engineer.

Vice Consul for Sweden.

Res., 802 N. 42nd St., Omaha, Neb.



# EHNBORN, CLEMENS

Active Member, 1912. Manufacturer. Res., 4450 Montana St., Chicago, Ill.



#### EICHHORN, M. J.

Charter Member, Active Member, 1908. Mech. Engineer, with Sargent & Lundy, Engrs. Res., 502 W. 60th Place, Chicago, Ill.



### EKLUND, SVEN

Active Member, 1913.

With Western Electric Company, Hawthorne, Ill. Res., 5030 Warwick Ave., Chicago, Ill.



### ENGWALL, CHARLES F.

Charter Member, Active Member, 1908. Inspecting Engineer. Res., 4351 N. Troy St., Chicago, Ill.



#### ERICKSON, EMIL

Active Member, 1912.

President Erickson Machinery Co., Chicago, Ill. Res., 7809 South Shore Drive, Chicago, Ill.



#### ERICSON, E. J.

Charter Member, Corresponding Member, 1908. Chief Chemist, Edgar Zinc Co., St. Louis, Mo. Res., 346 W. 1st St., Cherryville, Kansas.



### ERICSON, IVAR

Active Member, 1909.

With Chicago Architectural Bronze Co., Chicago. Res., 6959 Ozamam Ave., Chicago, Ill.



# ERICSON, JOHN, R. V. O.

Active Member, 1910.

President, 1912 and 1914.

City Engineer, City Hall, Chicago, Ill.

Res., 848 Lakeside Place, Chicago, Ill.



# ERICSSON, HENRY

Charter Member, Life Member, 1908.

President, 1913.

General Contractor, City Hall Square Building, Chicago, Ill.

Res., 534 Surf St., Chicago, Ill.



### ERICSSON, JOHN E.

Charter Member, Active Member, 1908.

Vice President, 1915.

General Contractor,

Lanquist & Illsley Co., Chicago, Ill.

Res., 4530 Beacon St., Chicago, Ill.



### ERICSSON, WALTER H.

Active Member, 1909.

With Henry Ericsson Company, Chicago, Ill.

1720 City Hall Square Building, Chicago, Ill.



### ERIKSON, CARL E.

Active Member, 1910,

Manufacturer.

Res., 710 Buckingham Place, Chicago, Ill.



### ERIKSON, CLIFFORD E. J.

Corresponding Member, 1910.

Address, 710 Buckingham Place, Chicago, Ill.



#### ESBJÖRNSON, ÅKE

Corresponding Member, 1910.

Engineer, Stockholms Superfosfat Fabriks A.-B., Månsbo, Sweden.

Res., Månsbo, Avesta, Sweden.



# FERNGREN, AUGUST

Active Member, 1910.

Manager, A. F. Cement Construction Co., Chicago. Res., 3052 Davlin Court, Chicago, Ill.



### FLODENBERG, A. T.

Charter Member, Corresponding Member, 1908. With A., T. & St. Fe R. R., Topeka, Kans. Res., 404 German Ave., Topeka, Kans.



### FOGEL, J. P.

Active Member, 1913.

Mechanical Engineer,
Western Electric Company, Hawthorne, Ill.
Res., 4210 N. Sawyer Ave., Chicago, Ill.



### FOGEL, R. W.

Active Member, 1909.

Architect with E. C. & R. M. Shankland, Chicago. Res., 1839 Warner Ave., Chicago, Ill.



### FOLKS, OSCAR

Corresponding Member, 1913.

Mech. Eng'r, Helsingfors Water Pipe & Supply Co. Helsingfors, Finland.



### FREDRICKSON, GOTTFRIED

Corresponding Member, 1910. Fagersta Bruks A.-B., Fagersta, Sweden.



### FRIBERG, EMIL

Active Member, 1912.

Superintendent, Lanquist & Illsley Co., Chicago, Ill. Res., 4619 Dover St., Chicago, Ill.



### GABRIELSON, ERIK V.

Corresponding Member, 1910.

Engineer, Allm. Sv. Elek. A.-B., Vesterås, Sweden. Res., Floragatan 17, Vesterås, Sweden.



### GULLBORG, JOHN S.

Active Member, 1909.

President, Alemite Metals Co., Chicago, Ill. Res., 4631 Beacon St., Chicago, Ill.



### GUSTAFSON, E. A.

Active Member, 1915.

With Stewart-Warner Speedometer Corporation, Chicago, Ill.

Res., 1836 S. Sawyer Ave., Chicago, Ill.



### GUSTAFSON, FRANK G.

Active Member, 1909. Builder and Real Estate Expert. Res., 4805 Grand Blvd., Chicago, Ill.



# GUSTAFSON, G. EDWARD

Active Member, 1912. Civil Engineer, E. C. & R. M. Shankland, Chicago, Res., 1213 Eddy St., Chicago, Ill.



### GÖRANSSON, S. G.

Active Member, 1912.

With Carter White Lead Co., Chicago, Ill.

Res., 7356 Blackstone Ave., Chicago, Ill.



### HAGLIND, BROR G.

Corresponding Member, 1914. Civil Engineer. Res., Unknown.



### HAEGSTEDT, A. L.

Active Member, 1914.

General Contractor and Builder.

Res., 727 Bittersweet Place, Chicago, Ill.



#### HALL, ERIC E.

Active Member, 1909.

County Architect.

11 So. La Salle St., Chicago, Ill.

Res., 1214 Cornelia Ave., Chicago, Ill.



### HAMRÉN, ERIK O.

Corresponding Member, 1916.

With C. A. Smith Lumber & Mfg. Co.,
Marshfield, Oregon.



### HANSON, VICTOR

Active Member, 1912. General Foreman, Crane Company, Chicago, Ill. Res., 540 Harvey Ave., Oak Park, Ill.



### HASSELQUIST, HUGO S.

Active Member, 1913.

Supt., Wahl Adding Machine Co., Chicago, Ill.

Res., 4046 Greenview Ave., Chicago, Ill.



# HEDELIN, CHARLES W.

Charter Member, Active Member, 1908. With Illinois Steel Company, North Works. Res., 4822 N. Ashland Ave., Chicago, Ill.



#### HEDMAN, C. M.

Active Member, 1910.

President, Hedman Mfg. Co., Chicago, Ill.
Res., 1330 Winnemac Ave., Chicago, Ill.



### HELLMAN, FREDRICK

Active Member, 1914.

With Carter White Lead Co., Chicago, Ill.
Res., 11745 Parnell Ave., Chicago, Ill.



### HENDRICKSON, OSCAR R.

Active Member, 1913.

Foreman, The N. W. Terra Cotta Co., Chicago, Ill. Res., 1961 Winona Ave., Chicago, Ill.



# HENREKSON, JOHN W.

Corresponding Member, 1913.

General Manager, Ahlen & Holm, Insjön, Sweden.



### HILLBERG, A. G.

Corresponding Member, 1912.

Hydraulic Engineer, Park Row Building, New York, N. Y.



### HODELL, ERNST

Corresponding Member, 1916.

Mech. Designer, American Locomotive Works, Schenectady, N. Y.

Res., 16 Swan St., Schenectady, N. Y.



### HODGSON, JOHN F.

Active Member, 1915.

Elec. Designer, Sargent & Lundy, Engineers, Chicago, Ill.

Res., 1301 N. Dearborn Ave., Chicago, Ill.



### HOGLUND, GUST. E.

Corresponding Member, 1910.

With Fort Wayne Electric Company, Res., 909 Parkview Ave., Fort Wayne, Ind.



### HOLINGER, EMIL F.

Corresponding Member, 1909.

General Manager, Tindall Morriss Company,
Eddystone, Pa.

Res., Soulas Hotel, 1227 Arch St., Philadelphia, Pa.



### HOLM, ERIC E.

Corresponding Member, 1912.

Mining Engineer, Loussavaara-Kirunavaara A.-B.
Res., Halmberget, Sweden.



# HOLMBERG, THORSTEN C.

Active Member, 1910.

With Illinois Steel Co., South Works.
Res., 5969 So. Union Ave., Chicago, Ill.



#### HOLMEN, A. R., R. V. O.

Corresponding Member, 1909. Chief Draftsman, Pennsylvania Lines, Columbus, O. Res., 73 Cleveland Ave., Columbus, Ohio.



#### HOLMES, SVEN

Charter Member, Active Member, 1908. Engineer, Carter White Lead Co., Chicago, Ill. Res., 7015 Oglesby Ave., Chicago, Ill.



### HOLTMAN, DUDLEY F.

Active Member, 1913.

With Chicago, Milwaukee & St. Paul, R. R. Res., 1465 Rascher Ave., Chicago, Ill.



### HULTAN, K. A.

Active Member, 1916.

With Illinois Steel Co., South Works, Chicago, Ill. Res., 7601 Saginaw Ave., Chicago, Ill.



### HVITFELDT, ROBERT

Associate Member, 1909.

Designer and Engraver, 508 S. Dearborn St. Res., 1330 Winnemac Ave., Chicago, Ill.



# IGGBERG, F. W.

Active Member, 1909. Vice President, 1913. Electrical Engineer, Western Electric Company, Hawthorne, Ill. Res., 3937 Jackson Blvd., Chicago, Ill.



#### JERNBERG, CARL

Active Member, 1910.

Superintendent, Standard Forgings Company, Indiana Harbor, Ind.

Res., 6550 Harvard Ave., Chicago, Ill.



### JERNBERG, C. RICHARD

Active Member, 1910.

Assistant Superintendent, Standard Forgings Co., Indiana Harbor, Ind. Res., 7139 Normal Blvd., Chicago, Ill.



### JOHANSON, THURE A.

Active Member, 1909. Superintendent, Cable Piano Company. Res., St. Charles, Ill.



# JOHNSON, ARTHUR A. V.

Active Member, 1913. Res., 247 Sheridan St., Zanesville, Ohio.



### JOHNSON, BROR

Active Member, 1915.

With Bates Valve Bag Company, Chicago, Ill.

Address, 1830 McCormick Building, Chicago, Ill.



### JONSSON, SIXTEN

Active Member, 1914.

Estimator and Eng'r, Lanquist & Illsley Co.,
Chicago, Ill.

Res., 2330 115th St., Chicago, Ill.



# KARLSTEEN, AXEL

Active Member, 1912.

General Contractor.

Res., 3019 Edgewood Ave., Chicago, Ill.



### KJELLSTEDT, L. HARALD

Corresponding Member, 1910.

Principal, International Correspondeence School,
Scranton, Pa.

Res., 1026 Woodlawn Ave., Scranton, Pa.



#### KULLBERGER, ERIC

Active Member, 1909.

With South Side Auto Exchange, 6047 S. Halsted St., Chicago, Ill.



# KUYLENSTJERNA, ADOLF

Corresponding Member, 1909.

Mech. and Elec. Engineer,
The American Railways Company,
913 Witherspoon Building, Philadelphia, Pa.



#### LAGERHOLM, EVAR

Active Member, 1914.

Sales Engineer, Illinois Tool Works, Chicago, Ill.

Res., 1417 Farragut St., Chicago, Ill.



# LANQUIST, ANDREW

Active Member, 1910. Builder, Lanquist & Illsley Co., Chicago, Ill. Res., 4630 Beacon St., Chicago, Ill.



### LARSON, AXEL F.

Active Member, 1909.

Supt., The Marquette Piano Co., Chicago, Ill.

Res., 7925 S. Peoria St., Chicago, Ill.



### LARSON, E. G.

Active Member, 1913. Supt. of Constr., A. R. Clark & Co., Chicago, Ill. Res., 6343 Elizabeth St., Chicago, Ill.



### LARSON, P. L.

Active Member, 1912.

Pres. and Treas., Central Iron Works, Chicago, Ill.
Res., 3528 W. Fulton St., Chicago, Ill.



# LEFFLER, HAKON M.

Corresponding Member, 1912. Res., Ljusne, Sweden.



# LEVIEN, RAGNAR J. O.

Active Member, 1914. With Indiana Steel Co., Gas Eng. Dept., Gary, Ind.



### LEVIN, A. M.

Corresponding Member, 1910. Professor, Kongl. Tekniska Högskolan, Stockholm, Sweden.



### LEVIN, ASTOLF P. E.

Corresponding Member, 1909.

Advertising Manager, The Sharples Separator Co.,
West Chester, Pa.

Res., 419 N. Walnut St., West Chester, Pa.



### LEVIN, N. D.

Charter Member, Corresponding Member, 1908. Chief Engineer, The Jeffrey Mfg. Co., Columbus, O. Res., 1814 N. High St., Columbus, Ohio.



# LIDSEEN, GUSTAVE

Active Member, 1912. Manufacturer. Res., 2942 Edgewood Ave., Chicago, Ill.



# LILJEGREN, GUNNAR O.

Corresponding Meember, 1910.

Manager Fire Protection Department,
Urbauer Atwood Heating Co., St. Louis, Mo.
Res., 3941 Lafayette Ave., St. Louis, Mo.



# LINDBERG, TORVALD

Corresponding Member, 1910. Box 445, Marshfield, Oregon.



# LINDBERG, EMIL

Active Member, 1914.

With Swedish Iron & Steel Corporation,
New York and Chicago, Ill.

Res., 4700 Sheridan Road, Chicago, Ill.



### LINDEBLAD, EINAR

Associate Member, 1916. Swedish Iron & Steel Corporation, Chicago, Ill. Res., 4700 Sheridan Road, Chicago, Ill.



#### LINDGREN, W. L.

Active Member, 1915.

Superintendent, The Standard Spiral Pipe Works, Chicago, Ill.

Res., 2230 N. Tripp Ave., Chicago, Ill.



### LINDQUIST, O. F.

Corresponding Member, 1912. General Contractor. Res., 1244 39th St., Rock Island, Ill.



### LINDWALL, K. G.

Associate Member, 1912.
With State Bank of Chicago.
Res., 4720 N. Sawyer Ave., Chicago, Ill.



# LJUNGBECK, TAGE G.

Corresponding Member, 1916 Mech. Engineer. Res, Kungsgatan 30, Malmö, Sweden.



### LUND, A. G.

Charter Member, Active Member, 1908. Architect, 810 W. 63rd St., Chicago, Ill. Res., Palos Park, Ill.



# LUNDGREN, A. A:SON, LIEUT.

Corresponding Member, 1912. Elfkarleö, Sweden.



### LUNDGREN, ADOLPH

Active Member, 1912. General Contractor. Res., 6828 Normal Blvd., Chicago, Ill.



# LUNDGREN, E. LEONARD

Corresponding Member, 1912.

District Engineer, U. S. Forest Service,
Beck Building, Portland, Oregon.



### LUNDGREN, ERIC R.

Active Member, 1908. Chief Draftsman, Pettibone, Milliken & Co, Chicago, Ill.

Res., 524 Clarence Ave., Oak Park, Ill.



### LUNDQUIST, HJALMAR

Associate Member, 1908.

Secretary, American Embargo Conference, Chicago, Ill.

Res., 1421 Summerdale Ave., Chicago, Ill.



### MALLING, MALTE

Active Member, 1912.

With Western Electric Company, Hawthorne, Ill. Res., 2603 N. Hamlin Ave., Chicago, Ill.



# MALM, JOHN L.

Corresponding Member, 1909.

Chief Metallurgist,

Western Metals Company, Denver, Colo.



### MALMGREN, VICTOR

Corresponding Member, 1912.

Res., 510 Newcastle St., Butler, Pa.



### MALMSTROM, ALEX, G.

Corresponding Member, 1909.

Chief Draftsman, National Cash Register Company,

Dayton, Ohio.

Res., 143 Indiana Ave., Dayton, Ohio.



### MAYER, HJALMAR

Actvie Member, 1909.

With R. E. Schmidt, Garden & Martin, Architects, Chicago, Ill.

Res., 5344 Winthrop Ave., Chicago, Ill.



### MELLQUIST, AXEL

Corresponding Member, 1912.

With Stephens Adamson Mfg. Co., Aurora, Ill. Res., 131 Galena Blvd., Aurora, Ill.



### MILDE, IVAR

Corresponding Member, 1910.

Kongl. Vattenfallsstyrelsen,

Klara 23, Karlstad, Sweden.



### MODINE, A. B.

Corresponding Member, 1910.

Manufacturer.

Perfex Radiator Company, Racine, Wis.



### MONSEN, GUNNAR S.

Corresponding Member, 1910.

General Contractor.

Res., Örebro, Sweden.



### MOOHL, J. G.

Corresponding Member, 1912.

With Beman & Smith, Providence, R. I.



### MOSSBERG, FRANK

Corresponding Member, 1914.

President, Frank Mossberg Co., Attleboro, Mass.
Res., Attleboro, Mass.



# NANNFELDT, GEORGE

Active Member, 1910.

With Link Belt Company, Chicago, Ill.
Res., 5756 S. Sangamon St., Chicago, Ill.



# NANNFELDT, JAKOB

Corresponding Member, 1913. With Allis Chalmers Mfg. Co., West Allis, Wis. Res., 555 72nd Ave., West Allis, Wis.



### NASSEN, HELGE

Active Member, 1914. With Chicago & Northwestern Railway Co. Res., 6352 S. Campbell Ave., Chicago, Ill.



#### NAUCKHOFF, B.

Corresponding Member, 1914. Supt., Menominee Elec. Mfg. Co., Menominee, Mich.



### NELSON, OSCAR

Corresponding Member, 1914. With Allis Chalmers Mfg. Co. Res., 599 69th Ave., West Allis, Wis.



### NICHOLSON, VICTOR

Active Member, 1913.

Asst. Eng. Chem., Department of Public Works, City of Chicago.

Res., 7621 Lowe Ave., Chicago, Ill.



### NORBERG, HARALD

Corresponding Member, 1914. Res., 6820 Bayliss Ave., Cleveland, Ohio.



### NORDER, G.

Corresponding Member, 1909. Res., Holmgatan 13, Falun, Sweden.



### NORELL, MARTIN

Charter Member, Active Member, 1908. Chief Draftsman, Chicago Steel Car Co., Harvey. Res., 7421 Blackstone Ave., Chicago, Ill.



### NORLIN, FRED

Charter Member, Active Member, 1908. Civil Engineer and Surveyor, 30 N. La Salle St. Res., 2744 Mildred Ave., Chicago, Ill.



### NORLING, REINHOLD A.

Corresponding Member, 1913.
With Aurora Automatic Machine Company,
Aurora, Ill.
Res., 180 Wilder St., Aurora, Ill.



### NYBERG, HENRY

Charter Member, Life Member, 1908. President, 1908-1909. Automobile Manufacturer. Res., Berlin, Ontario, Canada.



# NYDEN, JOHN A.

Active Member, 1913.

Architect, 64 W. Randolph St., Chicago, Ill.
Res., 5511 Wayne Ave., Chicago, Ill.



# OBERG, STEN V.

Corresponding Member, 1913. With Owosso Sugar Company, Owosso, Mich.



### OLSON, CARL E.

Active Member, 1911. Manufacturer. Res., 2216 W. Monroe St., Chicago, Ill.



### OLSON, JNO. O.

Corresponding Member, 1910. Chief Engineer, Lee Electric Co., Clarinda, Iowa. Res., 112 West Nodaway St., Clarinda, Iowa.



### OLSON, KARL E.

Active Member, 1913.
Chemist, Goldschmidt Detinning Co.,
East Chicago, Ind.
Res., 1105 Beacon St.



#### OLSON, KLAS O.

Active Member, 1909.

Asst. Engr'. Valuation, Grand Trunk Ry. System. Res., 1969 Winona Ave., Chicago, Ill.



#### ONGMAN, CLARENCE S.

Active Member, 1912.

Foreman, Water Pipe Extension, City Hall, Chicago Res., 1432 Balmoral Ave., Chicago, Ill.



#### OSTERGREN, HARRY

Active Member, 1912.

Fire Prevention Engineer, Chicago, Ill. Res., 3265 Cottage Grove Ave., Chicago, Ill.



#### OSTERGREN, ROBERT C.

Active Member, 1909.

Vice President, 1912.

Architect, Hall & Ostergren.

Addr., 11 So. La Salle St., Chicago, Ill.



#### OSTLIND, BENJAMIN

Corresponding Member, 1914.

Consulting Engineer and Architect.

Res., Irving Block 206, Marshfield, Oregon.



#### ÖSTLIN, OLOF

Corresponding Member, 1909.

Mechanical Engineer, Bolinders Mekaniska Verkstäder, Stockholm, Sweden.



#### PALMQUIST, THURE

Active Member, 1912.

With J. H. Heuser, Monadnock Block, Chicago. Res., 2701 Lincoln Ave., Chicago, Ill.



#### PARKE, PETER

Active Member, 1910.

Chief Engineer, Pullman Company, Chicago, Ill. Res., 5464 Everett Ave., Chicago, Ill.



#### PARSONS, H. N.

Active Member, 1914.

Health Department, City of Chicago. Res., 2716 Sunnyside Ave., Chicago, Ill.



#### PEARSON, HAROLD

Active Member, 1912.

Designer, Universal Portland Cement Company, Buffington, Ind.

Res., 7244 Dobson Ave., Chicago.



#### PETERSON, C. H.

Corresponding Member, 1914.
Southwestern Representative,

Baldwin Locomotive Works.

1610 Wright Building, St. Louis, Mo.



#### PETERSON, C. S.

Active Member, 1912.

Director, Peterson Linotyping Company.

Res., 757 Buena Ave., Chicago, Ill.



#### PETERSON, FRANK A.

Active Member, 1912.

Surveyor.

Addr., R. 507, 164 W. Washington, Chicago, Ill.



# PETTERSON, HUGO

Corresponding Member, 1912.

Construction Engineer, Mt. Vernon Bridge Co. Res., 506 E. Gambier St., Mt. Vernon, Ohio.



#### PETTERSON, HJALMAR

Corresponding Member, 1909.

With Finland State Railway, Helsingfors, Finland. Res., Borgågatan 21, Helsingfors, Finland.



#### PIHL, KARL

Active Member, 1914.

With A. & A. Mfg. Co., Chicago, Ill. Res., 618 Humphrey St., Oak Park, Ill.



#### RANDERS, F.

Active Member, 1912.

With Sargent & Lundy, Engineers.

Res., 846 Roscoe St., Chicago, Ill.



RANG, C. E.

Associate Member, 1913.

Artist.

General Delivery, Davenport, Iowa.

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#### RENNERFELT, IVAR

Corresponding Member, 1909. Chief Engineer, A.-B. Elektriska Ugnar, Stockholm, Sweden. Res., Vanadisvägen 24, Stockholm, Sweden.



#### RISSLER, ALBIN

Charter Member, Life Member, 1908. President, 1915. Vice President, 1908-09-10. Mechanical Engineer, Chicago Railway Equipment Company, Chicago, Ill. Res., 7225 Emerald Ave., Chicago, Ill.



#### ROOS, ERIC

Active Member, 1909. With Indiana Steel Co., Chicago, Ill. Res., 219 Wisconsin St., Chicago, Ill.



#### ROOS, GUNNAR

Corresponding Member, 1910. Sales Engineer, Atlas Mekaniska Verkstäder, Stockholm, Sweden. Res., Heimdalsgatan 13, Stockholm, Sweden.



#### RYDSTROM, UNO

Corresponding Member, 1913.

With A.B. Diesel Motorer, Stockholm, Sweden.

Res., Hornsgatan 26-I, Stockholm, Sweden.



#### SAFSTROM, ERLAND

Active Member, 1914.

Mech. Designer, The B. F. Cummings Mfg. Co.,
Chicago, Ill.

Res., 906 Grace St., Chicago, Ill.

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#### SAHLIN, JOHN

Active Member, 1912.

With Western Electric Company, Hawthorne, Ill. Res., 910 S. Sixth Ave., Maywood, Ill.



## SANDEGREN, ANDREW

Active Member, 1910.
Architect.

2064 Conway Building, Chicago, Ill.



#### SANDELL, H. K.

Active Member, 1910.

With Mills Novelty Company, Chicago, Ill. Res., 1646 Farragut Ave., Chicago, Ill.



#### SAVE, CARL

Active Member.

Secretary, 1916.

Res., 3209 Hirsch St., Chicago, Ill.



#### SEABERG, FRED

Charter Member, Active Member, 1908.

Treasurer, 1908-1909.

Designer, Illinois Steel Co., 208 N. La Salle St.

Res., 5210 Glenwood Ave., Chicago, Ill.



#### SCHOTT, JOHN H.

Active Member, 1912.

Architect.

Res., 2051 Montrose Ave., Chicago, Ill.



#### SELANDER, CARL

Active Member, 1914.

With Western Electric Co., Hawthorne, Ill.
Res., 1415 N. Hamlin Ave., Chicago, Ill.



#### SJOLANDER, AXEL K.

Active Member, 1914.

Engineer, Link Belt Company, Chicago, Ill.

Res., 1525 Winnemac Ave., Chicago, Ill.



#### SJÖSTRÖM, FRANK

Active Member, 1913.

Draftsman.

Res., 1466 Summerdale Ave., Chicago, Ill.



# SKJÖLD, GÖSTA

Corresponding Member, 1909. Kungl. Vattenfallsstyrelsen, Stockholm, Sweden. Res., Forshaga, Sweden.



#### SKOGMARK, JOHN

Active Member, 1912.

With W. D. Main & M. F. Chase,
Consulting Engineers, 411 Marquette Building,
Chicago, Ill.



#### SODERSTAM, J. T.

Active Member, 1910.
Civil Engineer,
The Sanitary District of Chicago.
Res., 1211 Newport Ave., Chicago, Ill.

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#### SONANDER, JOSEF

Corresponding Member, 1912. With International Harvester Corporation, P. O. Box 1131, Moscow, Russia.



#### SPAAK, CHAS, E.

Corresponding Member, 1910. Res., Alingsås, Sweden.



## STERZEL, S. E.

Corresponding Member, 1912.
Res., Kaponiergatan 5, Gothenburg, Sweden.



#### STJERNSTEDT, J. W.

Corresponding Member, 1912. Res., 402 Rialto Building, San Francisco, Cal.



#### STJERNBERG, AXEL

Active Member, 1914.

Draftsman, American Bridge Co., Lassig Plant, Chicago, Ill.

Addr., 619 City Hall Square Building, Chicago, Ill.



#### STOLPE, G. E.

Corresponding Member, 1909.
Chief Draftsman, Locomotive Department,
A. T. & S. Fe Ry. Co., Topeka, Kans.

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#### STRANDBERG, ERIK P.

Active Member, 1912. General Contractor. Res., 5027 Drexel Blvd., Chicago, Ill.



#### STRID, SVEN J.

Charter Member, Active Member, 1908. With Central Locomotive & Car Works, Chicago fleights, Ill. Res., 11321 Curtis Ave., Chicago, Ill.



#### STROMBORG, CHAS. G.

Active Member, 1914. With Western Electric Company, Hawthorne, Ill. Res., 3939 Wrightwood Ave., Chicago, Ill.



#### STRUKEL, ARVID

Corresponding Member, 1912.
Res., Andrégatan 7, Helsingfors, Finland.



#### SUNDSTROM, HANS

Corresponding Member, 1909. Chemist, Universal Portland Cement Co., Morgan Park, Duluth, Minn. 429 N. 48th Ave., Duluth, Minn.



#### SUNNERGREN, S. P.

Corresponding Member, 1912.

Chief Draftsman,

Denver & Rio Grande R. R. Co., Denver, Colo.

Res., 3447 Pecos St., Denver, Colo.



#### SWENSON, CARL G.

Corresponding Member, 1915

Vice President, Oakes Pressed Steel Co.,
Indianapolis, Ind.

Res., 1023 Fletcher Ave., Indianapolis, Ind.



#### SWENSON, GODFREY

Corresponding Member, 1916.

Pres. and Treas., Swenson Construction Company.
Res., 78 Lydia St., Kansas City, Mo.



#### SYLVAN, CHR.

Corresponding Member, 1910.

Editor of Industritidningen "Norden,"
Stockholm, Sweden.

Res., Tunnelgatan 19A, Stockholm, Sweden.



#### TJÄDER, JOHN

Corresponding Member, 1909. Res., Birkagatan 18, Stockholm, Sweden.



#### TORNBERG, KARL

Corresponding Member, 1910. Chemist and Mining Engineer, Oliver Iron Mining Co., Norway, Mich.



#### TÖRJESON, T. A.

Corresponding Member, 1915. Ingeniör, Kungl. Järnverksstyrelsen, Stockholm. Res., Saltsjöbaden, Sweden.

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#### TUNELIUS, CHAS, E.

Charter Member, Active Member, 1908. Machine Manufacturer, 411 South Clinton St., Chicago, Ill. Res., 5432 Prairie Ave., Chicago, Ill.



#### VELANDER, V. R.

Corresponding Member, 1910.

Asst. Eng., W. W. Sly Mfg. Co., Cleveland, Ohio.

Res., 8410 Denison Ave., Cleveland, Ohio.



#### WÆSSMAN, L. G.

Active Member, 1913.

With R. W. Hunt & Co., Engineers.
Res., 106 E. Walton Place, Chicago, III.



#### WANDELL, IVAR

Corresponding Member, 1914.

Draftsman, E. W. Young, Architect.
Res., Y. M. C. A., South Bend, Ind.



#### WAXBOM, CHAS. J. E.

Corresponding Member, 1910. Consulting Engineer. Res., 151 E. Park St., Westerville, Ohio.



#### WEDBERG, SVEN H.

Corresponding Member, 1913. Res., Döbelsgatan 5-III, Stockholm, Sweden.

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WERN, GUST. PERS., R. V. O.

Corresponding Member, 1912.

President, Wern Mach. and Eng. Co.,
30 Church St., New York, N. Y.



WERNER, F. J.

Active Member, 1914.

Assistant Master Mechanic, Inland Steel Company. Res., 3433 Michigan Ave., Indiana Harbor, Ind.



WESTBERG, CARL A.

Active Member, 1910. Vice President, East Chicago Company, Indiana Harbor, Ind. Res., 301 W. 67th St., Chicago, Ill.



WESTERBERG, HUGO EM.

Active Member, 1910.
Res., 102 E. Chestnut St., Chicago, Ill.



WESTERLIND, CARL

Active Member, 1909.

Treasurer, 1910.

Architect, Chicago, Ill.

Res., 1201 Ainsley St., Chicago, Ill.



WEYDELL, F. O.

Charter Member, Active Member, 1908. Manufacturer. Res., 6333 Ingleside Ave., Chicago, Ill.



#### WENNERBERG, AUGUST

Active Member, 1915.
Consulting Engineer.
Res., 1576 Maple Ave., Evanston, Ill.



#### WICKLAND, ALGOT A.

Active Member, 1910.

Treasurer, 1912.

Production Engineer, Crane Company, Chicago.
Res., 1932 Oakdale Ave., Chicago, Ill.



#### WIDELL, M. E.

Active Member, 1914. Chief Draftsman, American Can Co., Maywood, Ill. Res., 900 N. 6th Ave., Maywood, Ill.



#### WILANDER, P.

Active Member, 1909.

Mech. Eng'r., Indiana Steel Company, Gary, Ind.
Res., 556 Madison St., Gary, Ind.



#### WINGREN, ARTHUR

Corresponding Member, 1912. Finnboda Slip, Stockholm, Sweden.



#### WITTING, ALBIN G.

Active Member, 1916.

Asst. Chief Eng'r., Indiana Steel Co., Gary, Ind. Res., 610 W. 8th Ave., Gary, Ind.



#### WOHLBERG, J. A.

Charter Member, Active Member, 1908.

With Illinois Steel Company, South Chicago.
Res., 6346 S. Wood St., Chicago, Ill.

#### ACKERLIND, D. M.

Corresponding Member, 1916. Automobile Designer, Vilie Motor Vehicle Co., Moline, Ill.

Res., 517 42nd St., Rock Island, Ill.

#### ANDERSON, JOHN C. A.

Active Member, 1914.

Treasurer, Reliance Elevator Co., Chicago, Ill.
Res., 4525 N. Rockwell St., Chicago, Ill.

#### ANDERSON, Y. G.

Active Member, 1913. Res., Unknown.

#### ASTROM, CARL P.

Corresponding Member, 1915. Chief Engineer, M. H. Treadwell Co., New York. Res., 14 Chestnut St., East Orange, N. J.

#### BERG, JOSEPH

Active Member, 1915.
Chief Engineer, Stewart-Warner Speedometer Corporation, Chicago, Ill.
Res., 651 Belmont Ave., Chicago, Ill.

#### BILLNER, K. P.

Corresponding Engineer. Billesholms Grufva, Sweden.

#### EKBLOM, F. W.

Active Member, 1915. Mech. Draftsman, North-Western Ry. Co., Chicago. Res., 1510 N. Spaulding Ave., Chicago, Ill.

#### FRÖLEN, FREDRIK

Corresponding Member, 1914.

With Nickols & Todsen Co., Stockholm, Sweden.

Res., Odensgatan 17, Stockholm, Sweden.

#### HAWKINS, KARL

Active Member, 1916.

Supt. and Designer, Stierlin Mach. & Die Works, Chicago, Ill.

Res., 2705 N. Whipple St., Chicago, Ill.

#### HAWKINSON, AXEL

Associate Member, 1915.

Vice Consul for Sweden.

Res., 3105 Jefferson St., Kansas City, Mo.

#### HOLMER, F. N.

Active Member, 1916.

With Illinois Steel Co., South Works, Chicago, Ill.

Res., 7601 Saginaw Ave., Chicago, Ill.

#### HYTTENBERG EUGEN

Corresponding Member, 1914.

Lieutenant.

Norrviken, Sweden.

#### JOHNSON, E. S.

Active Member, 1916.

Tool Designer, Western Electric Company,

Hawthorne, Ill.

Res., 2846 Lyndale St., Chicago, Ill.

#### KROPP, C. A.

Active Member, 1914.

President, Kropp Forge Company, Chicago, III. 2512 W. 21st St., Chicago, III.

#### LEVEDAHL, AXEL

Corresponding Member, 1913.

Consulting Engineer,

Aurora Automatic Machine Co., Aurora, Ill.

Res., 33 Hickory Ave., Aurora, Ill.

#### LUNDBERG, SVEN, LIEUT.

Corresponding Member, 1914.

Asst. Superintendent, Nobel Bros., Baku, Russia.

Res., Barnhusgatan 13, Stockholm, Sweden.

#### LUNDQUIST, H. R.

Active Member, 1915.

Designer, Western Electric Co., Hawthorne, Ill. Res., 1421 Summerdale Ave., Chicago, Ill.

#### MAGNUSON, T. J.

Active Member, 1914.

Supt., H. E. Pridmore Molding Mach. Co., Chicago. Res., 1655 Clifton Park Ave., Chicago, Ill.

#### MAGNUSSON, FRITHIOF

Corresponding Member, 1914.

Architect.

P. O. Box 423, Marshfield, Oregon.

#### MALMSTEN, J. O.

Active Member, 1916.

Mech. Designer, Indiana Steel Co., Chicago, Ill.

Res., 1127 Oak Grove Ave., Chicago, Ill.

#### MONSON, AXEL A.

Active Member, 1915.

Manager, Universal Stamping & Mfg. Co., Chicago.

Res., 4034 N. Monticello Ave., Chicago, Ill.

#### OLSON, ERNEST M.

Active Member, 1913.

With Western Electric Company, Hawthorne, Ill. Res., 4214 N. Ashland Ave., Chicago, Ill.

#### RAMSTEN, K. E.

Corresponding Member, 1915.

With Westinghouse Mfg. Co.

Res., 849 Rebekka Ave., Wilkingsburg, Pa.

#### RAPP, OSCAR

Active Member, 1916.

Manufacturer, Blomfeldt & Rapp Co., Chicago, Ill. Res., 1443 Berwyn Ave., Chicago, Ill.

#### ROBERTSON, GUSTAF E.

Active Member, 1913.

With Indiana Steel Company, Gary, Ind. Res., 2224 S. Irving Ave., Chicago, Ill.

#### SJOBRING, N. P.

Active Member, 1916.

Mech. Engineer, Acme Supply Co., Chicago, Ill. Res., 1008 N. Laurel Ave, Chicago, Ill.

#### SPARR, VICTOR W.

Active Member, 1914.

Elec. Designer, Sargent & Lundy, Engineers. Res., 1345 North Shore Ave., Chicago, Ill.

#### SWANSON, E. J.

Active Member, 1915.

Supt. Tool and Die Department, Stewart-Warner Speedometer Corporation, Chicago. Res., 4614 N. Leavitt, St., Chicago, Ill.

#### WEDBERG, AXEL G. W.

Corresponding Member, 1916.

Estimator.

Res., 1319 Park Ave., Kansas City, Mo.

#### MEMBERS

of

The Swedish Engineers' Society of Chicago July 1, 1916.

Honorary				. 2
Life				6
Active				157
Corresponding in	<b>U.</b> S. a	nd Canada	<b>1</b>	64
Corresponding in	Europe			44
Associate				6
Total				279

# Annual Report

For the Swedish Engineers' Society of Chicago for the Year 1915.

A short historical review of the Society's career may be of interest particularly for new members or those who have not long been residents of Chicago.

The constitutional meeting was held at Kuntz-Remmler Restaurant, Chicago, October 10th, 1908. Present were: Henry Nyberg, Albin P. Rissler, Henry Ericsson, Fred Seaberg, Sven Holmes, A. F. Colgren, Hjalmar Blom, Sven J. Strid, Axel Flodenberg, Eugene Nyberg, J. A. Wohlberg, Emil J. Liljeblad, B. E. Forsell, Eric Roos, Eric Sundvahl and G. A. Akerlind. The following officers were chosen: President, Henry Nyberg; Vice-President, Albin P. Rissler; Secretary, G. A. Akerlind; Treasurer, Fred Seaberg.

Messrs. A. Alzen, John Brunner, Henry Ericsson, A. G. Lund and Fred Norlin were chosen as members of the Board of Directors, and it was arranged that the Officers and Board of Directors chosen should continue to serve also for the year 1909.

The first Membership Book was issued in 1909 and the number of members was then 74.

For the year 1910 Mr. Gustaf A. M. Liljenerantz accepted the office of President,—Mr. Albin P. Rissler remaining as Vice-President and G. A. Akerlind as Secretary. Mr. Carl W. Westerlind was chosen as Treasurer. The number of names in the Membership Book was 120.

For the year 1911 Dr. Ernest J. Berg was chosen as President and Mr. C. G. Axell as Vice-President. G. A. Akerlind remaining as Secretary and Mr. K. G. A. Bjurstrom chosen as Treasurer. The Membership Book for that year contained 179 names.

For the year 1912 City Engineer John Ericson was chosen President and Robert C. Ostergren Vice-President. G. A. Akerlind remaining as Secretary and Mr. Algot A. Wickland was chosen Treasurer. The Membership Book for that year contained 209 names.

For the year 1913 the then Building Commissioner of the City of Chicago, Mr. Henry Ericsson was elected President and Mr. F. W. Iggberg as Vice-President. G. A. Akerlind remaining as Secretary and Mr. C. A. Bolin elected as Treasurer. The Membership Book issued that year contained 254 names.

For the year 1914 City Engineer John Ericson was again elected as President and Mr. C. E. Carson elected as Vice-President. Mr. G. A. Akerlind remained as Secretary and Mr. C. A. Bolin was re-elected as Treasurer. The Membership Book for that year contained 265 names. As the Secretary had to be frequently absent from the City during the year, the Board of Directors appointed Mr. C. G. Axell to fill the Secretaryship during such periods.

For the year 1915 Mr. Albin P. Rissler was elected President and Mr. John E. Ericsson, Vice-President; Mr. G. A. Akerlind, Secretary, and Mr. Axel Akers, Treasurer. The Membership Book for the year contained 276 names.

During the past year the Society has as usual exchanged literary matters with the Swedish Engineers, 271 Hicks Street. Brooklyn, N. Y., and sent our Catalog to all Technical Schools and Technical Societies in Sweden, as well as to the Swedish Legation in Washington and Swedish Consuls in the United States. From Järnkontoret in Stockholm we have as in previous years received copies of their valuable publication. Teknologföreningen in Stockholm have as in previous years donated their publication "Teknisk Tidskrift," and our fellow member, Mr. Christopher Sylvan, Editor in Chief of "Industri-Tidningen Norden," has as before donated that publication. Mr. John Brunner has donated to our library two very valuable German cartographic works containing maps of the countries of the world, political, minerals, agricultural, climatic and trade routes, also donations by Mr. F. O. Weydell. Swedish-American weekly newspapers "Svenska Amerikanaren," "Svenska Tribunen-Nyheter," "Svenska Amerikanska Posten" of St. Paul, Minn., "Rockford-Posten" of Rockford, Ill., have been received regularly during the year, and the Society wishes to express its appreciation for the kindness so extended.

The report of the Library Committee will shop more in detail these matters concerning the Library, and the Lecture Committee those concerning the Lectures. The House Committee activities are set forth in the report of that committee. The Special Committee, appointed in 1913 to arrange for the Engineering Convention to be held in Chicago in the summer af 1915, have not as yet finished its work and the report of this committee will be found with the reports of the standing committees.

When the Secretary accepted the office for 1915, he believed that his work as inspecting engineer might have taken him more permanently to Chicago, but such was not the case and he feels it keenly that he has not been able to do justice to the Society as its Secretary.

He, therefore, now steps out with the best wishes to his successor and to the welfare and progress of the Swedish Engineers' Society of Chicago.

When now relieved of the work for the Society, it is the Secretary's hope and intention to work out some sort of history of the Society's inception, start and progress and to elucidate some conditions, situations and characteristics as met with in the past and to what extent those may still be determining factors to deal with at present and in the future.

Thanking particularly all charter members for their co-operation in organizing the Swedish Engineers' Society of Chicago and those members who in later years by strenuous work have helped in the progress of the Society and the membership at large for their interest and indulgence for the many short-comings, the Secretary sincerely wishes that harmony and high principles may always follow the activities of the Society and the honor of the name we bear.

G. A. AKERLIND.

# Treasurer's Report for 1915.

To the Swedish Engineers' Society of Chicago.

Gentlemen:—The following shows the receipts and disbursements of money and the financial standing of the Society for the year ending December 31, 1915.

#### RECEIPTS.

Balance from year 1914	.\$1,562.28
Due from Sw. Eng. Convention, 1914	. 47.79
Money received during 1915	. 956.87
Total	.\$2,566.94

#### DISBURSEMENTS.

Expenses for the year 1915	\$ 996.67
Assets on hand, Dec. 31, 1915, as follows:	
Commonwealth Edison Bond No. 18095	1,035.00
"Permanent Fund" in Savings Bank	153.76
Cash on hand	256.72
Due from Sw. Eng. Convention	124.79
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The following is an itemized account of money received and expended during 1915:

# ITEMIZED RECEIPTS DURING 1915.

Admission Fees from new members. \$ Dues from Active members.  Dues from Corresponding members.  Dues from Associate members  Interest on Commonwealth Edison Bond.  From the 1914 House Committee.	46.00 704.00 114.25 16.00 50.00 21.66
Donation	$\frac{1.00}{3.01}$
Miscellaneous	.95
\$	956.87
ITEMIZED DISBURSEMENTS DURING 1915.	
Office Rent in City Hall Square Bldg\$	375.00
Electric Light	6.00
Telephone	31.03
Dues to Sw. Hist. Society	2.00
State Bank of Chicago, Collection charges	.75
Lecture Committee	2.00
Library Committee, Subscriptions	42.85
Trasdockan Committee  House Committee—	26.50
Hall Rent, Annual Ball	
Invitations for Annual Ball	
Dance Programs	
Deficit for October meeting 10.00	
	54.50
1915 Membership Book and Year Book—	01.00
Photo Engravings \$ 60.00	
Printing	
Mailing	
	312.86
Secretary's Expenses—	
Notices and Announcements—\$26.40	
Postage	
Stationery and Office Supplies	
Typewriting 9.95	
Miscellaneous	
	86.85

Treasurer's Expenses—
Bonding in American Surety Co \$ 5.00
Stationery and Supplies 3.00
Postage
Ledger
Treasurer's Statement
Miscellaneous
27.40
Miscellaneous—
Furniture repairs\$3 3.00
Waste basket
Door mat
100 keys
Pictures frames 6.00
——————————————————————————————————————
20.00
Total\$ 996.67
Ισιαίφ σσσσσ
ASSETS.
Commonwealth Edison Co. Bond\$1,035.00
"Permanent Fund"
Cash on hand
Due from Sw. Eng. Convention
Balance, Dec. 31, 1915
Balance, Dec. 31, 1914
T 6 41
Loss for the year
Outstanding Dues, Dec. 31, 1915, about 300.00

Respectfully submitted,

AXEL AKERS, Treasurer.

# Auditing Committee's Report.

Chicago, Ill., January 9, 1916.

The Swedish Engineers' Society of Chicago.

Gentlemen:—The undersigned having been appointed a committee to audit the Treasury's Books for 1915, find them to be correct, and the Society's finances as follows:

#### RECEIPTS.

Cash balance on hand January 1st, 1915\$1,562.28
Total receipts during 1915 956.87
Due from Swedish Engineers' Convention, 1914. 47.79
Total\$2,566.94
EXPENDITURES.
Expenses for the year 1915 \$ 996.67
Balance on hand December 31st, 1915 1,570.27
Total\$2,566.94
The balance on hand consist of one Commonwealth Edison
Bond No. 18095
Cash in Bank and in Treasurer's hands
Due from Swedish Engineers' Convention
Total\$1,570.27

We take pleasure in recommending that the Society accept with a vote of thanks, the faithful services rendered by its Treasurer, Mr. A. Akers.

Respectfully submitted,

G. NANNFELDT, HANS SUNDSTROM, HELMER DEDERING.

# Report of Lecture Committee for 1915.

Honorable President and Fellow Members:

The Lecture Committee for 1915 consisted of the following: Mr. V. Nicholson, Mr. John A. Nyden and Mr. J. P. Fogel.

The following lectures were furnished:

Mr. L. S. Marsh, who at the February meeting gave an illustrated lecture on Military Explosives.

Prof. Penn, from Armour Institute, who at the April meeting gave an illustrated lecture on the Panama Canal.

Mr. H. S. Baker, who at the May meeting gave an illustrated lecture on the New Municipal Shops, then in the course of erection.

Mr. John E. Ericson, City Engineer, who at the October meeting gave an illustrated talk on matters pertaining to the New Wilson Ave. Tunnel and Crib. Mr. Wilson, who at the November meeting gave a talk on The Fundamentals of Efficiency.

An inspection trip was arranged for at the New Municipal Shops during September, and about twenty participated.

The Stereopticon belonging to the Society has been used on all the illustrated lectures with fairly good results.

It would be well, however, in the future to have one man operate this machine whenever it is used, as results, we believe, would be much better.

The Lecture Committee needs the active assistance of every member in the Society, and should any member desire to give a lecture, or know of any one who can lecture, it would be a great help to both Committee and the Society if he would notify this Committee of the fact.

Yours respectfully,

V. NICHOLSON, Chairman.

# Report of the Library Committee for the Year 1915.

The Committee has during the year expended \$43.70 on subscriptions to various periodicals and newspapers, of which an itemized list is hereby attached.

Besides carrying the same publications which were available in the library during 1914, we have during the past year added the following: "Geographical Magazine," "Ingeniören," "Svenska Turist-Föreningens Årsskrift," "Verkstäderna," "Svenska Dagbladet," "Strix" and "Söndagsnisse." We have thus had the following number of periodicals available in the library during the year 1915: 11 American Magazines, of which 9 are on purely technical and two on various other subjects; Bulletins from the Universities of Illinois, Bureau of Mines and Bureau of Standards, Washington, D. C., and from the Swedish Chamber of Commerce in New York; 10 Swedish Magazines, 7 technical and 3 literary and pictorial; one Swedish newspaper, Svenska Dagbladet, and two Swedish comic papers, Strix and Söndagsnisse, also four Swedish-American newspapers.

Owing to the very limited storage space in our library, we have found it necessary to dispose of all back numbers of these periodicals, only keeping the last year's copies on hand.

The proximity of the Public Library and the John Crerar Library to our Club rooms, at which two places all editions of the above publications can be found by anyone wishing to study them, was also taken into consideration in the disposal decision. Our library is also entirely inadequate as a study consisting as it does of only one room, this being a combined library, office, smoking and lounging room, whereas if we had a separate room assigned for readers only, we would have more benefit of the money now expended on all these papers.

Fully appreciating the great expense the Society is under in having this centrally and most conveniently located office in the heart of the city, we hesitate to recommend any expansion of the present quarters, but we beg to submit a suggestion to investigate the near North or South Side if not a larger quarter can be gotten there for about the same expense.

Respectfully submitted this 29th day of January, 1916,

THE LIBRARY COMMITTEE,

Sven E. Holmes, Chairman.

# Report of the House Committee for 1915.

The Committee started its activities with the regular meeting February 20th. This meeting was held at Svithiod Singing Club. 38 members and their friends present.

In place of the regular meeting, a "Ladies' Night" was held at Svenska Klubben, March 20th. 69 persons attended this affair.

 $\label{eq:April-24th} \mbox{April-24th, regular meeting was held at Svithiod Singing Club.} \mbox{19 members present.}$ 

The next regular meeting was held June 5 at Svithiod Singing Club. 31 members and their friends present.

During the month of July a family picnic was arranged for at Desplaines. About 40 members and friends were present.

October 2nd, the Society's family crawfish party and dance took place at the Svithiod Singing Club. 81 ladies and gentlemen were present.

October 23rd, regular meeting was held at Svenska Klubben. 30 members present.

November 27th, regular meeting was held at Svithiod Singing Club. 35 members and friends attended this meeting.

December 18th, the Society's annual election was held at the Svithiod Singing Club. 28 members present.

January 29th, 1916, the Society's annual meeting was held at Svithiod Singing Club. 56 members and friends present.

Respectfully submitted,

S. G. GÖRANSON, Temporary Chairman, House Committee.

# RAPPORT AF VÄSTRA ORGANISATIONSKOMMITTÉN FÖR SVENSKA INGENIÖRSKONGRESSEN I FÖRENTA STATERNA 1915.

Till Svenska Ingeniörs-Föreningen af Chicago!

Vid föregående årsmöte redogjordes i hufvudsak de förberedande arbeten, som vidtagits i och för Svenska Ingeniörs-Kongressens hållande i Chicago. I enlighet med upparbetadt program af Västra Organisationskommittén, som godkändes såväl af Svenska Teknologföreningen som af den Östra Organisationskommittén, bestämdes mötets förhandlingar att försiggå den 9, 10 och 11 September 1915.

Trots ingångna underrättelser från den Svenska kommittén angående omöjligheten att förbereda deltagandet från svensk sida på sätt som eljest afsetts, på grund af de europeiska krigsförvecklingarna, fortsattes dock arbetet af de båda organisationskommittéerna oafbrutet. Omkring 900 namn på svenska ingeniörer och industriella män hade hopsamlats såsom en följd af tryckandet och spridandet af cirkulärer, inregistreringskort m. m. Det blef också snart tydligt, att den kommitté, bestående af 18 medlemmar, som ursprungligen tillsattes att utföra arbetet, måste förstärkas, och ytterligare sex medlemmar kallades att medverka på de fem specialkommittéer, som tillsatts för att fördela det betydande arbete, som, på grund af Kongressens hållande i Chicago, kommit att falla på denna kommitté.

Sålunda hafva icke mindre än 18 möten hållits och åtta cirkulärer utsändts, hvaraf ett hade förberedts af presidenten af Ingeniörs-Föreningen. I slutet af Mars 1915 förelåg för utdelning 2,000 exemplar af "Advanced List of Members", som upptog namn på 34 svenska och 170 svensk-amerikanska delegater jämte en kortare historik öfver det förberedande arbetet samt förslag till program öfver mötet.

Särskilda öfverenskommelser hade uppgjorts med Chicago North-Western Railroad Co. att trycka och utdela omkring 1,000 exemplar af en illustrerad broschyr öfver färden till San Francisco. Flera hundra af dessa kongresstryck jämte föregående prospekt sändes till Sverige för att utdelas.

Det slutliga programmet för Kongressen utsändes i början af Augusti och den 1 September förelåg medlemslistan med 300 namn färdigtryckt. Denna lista upptog fem hedersledamöter med svenska ministern i Washington, F. A. F. Ekengren, såsom hedersordförande, 40 delegater från Sverige och 255 medlemmar från Förenta Staterna och Canada, af hvilka 110 registrerats genom

den Östra Organisationskommittén. De från Sverige utsända deltagarne i Kongressen utgjorde 15, med ingeniörerna J. Körner och F. Sandelin såsom Svenska Teknologföreningens representanter.

Kongressens öppnande ägde rum torsdagen den 9 September 1915 å Hotel La Salle, hvarvid voro närvarande 173 delegater med damer. Af dessa tillhörde ett 50-tal den östra kontingenten. Tvänne tekniska sessioner höllos med fyra föredrag, af hvilka två voro illustrerade. Särskilda anordningar hade gjorts bland annat åt utflykter till några af de större och mest sevärda industriella anläggningar. Icke mindre betydelsefulla för Kongressens framgång voro de festligheter, som arrangerats under kongressdagarne, och hvarvid tvänne illustrerade föredrag af mer eller mindre teknisk natur gåfvos. Höjdpunkten af dessa festligheter nåddes dock vid banketten på Hotel La Salle, där en samling af något öfver 200 personer infunnit sig att fira afslutningen af Kongressen. I enlighet med ett för tillfället upprättadt program höllos flera, synnerligen intressanta, tal af såväl kongressdeltagare som af särskildt inbjudna inom svenska kolonien i Chicago framstående personer.

Fullständiga detaljer öfver Kongressens samtliga förhandlingar komma att delgifvas i en under arbete varande illustrerad Minnesbok, som kommer att tillsändas alla medlemmar af Kongressen i början af Juli månad. Efter afslutadt arbete och inkomna förhandlingar från Revisionskommittén ämnar den Västra Organisationskommittén inlämna till Svenska Ingeniörs-Föreningen en slutlig rapport, omfattande dels Minnesboken och dels de finansiella detaljerna.

Tack vare de frikostiga bidragen från hrr Henry Ericsson, Andrew Lanquist, John E. Ericsson samt Lanquist & Illsley Co. disponerar kommittén i tillgångar för närvarande öfver en summa af \$487.85, hvaraf \$300.00 bilagts af den Östra Organisationskommittén såsom medel för tryckningsomkostnader. Af dessa tillgängliga medel kommer att återbetalas det lån af \$124.79, som erhållits från Svenska Ingeniörs-Föreningen af Chicago. Utgifterna i förening med tryckandet af Minnesboken beräknas uppgå till cirka \$350.00.

Kommittén står äfven i tacksamhetsskuld till den svenskamerikanska pressen för det värdefulla bistånd, den gifvit såväl i delgifvandet af de förberedande organisationsarbetena som i spridandet af betydelsen och resultatet af den Första Ingeniörskongressen.

Att döma af de mångfaldiga och personliga meddelanden, som senare ingått från Envoyén Ekengren. Svenska Teknologföreningen och delegater, från Östra Organisationskommittén och medlemmar i allmänhet, synes Kongressen i alla afseenden hafva varit en fullkomlig success. I sin rapport till Svenska Teknologföreningen, som torde vara af intresse att återgifvas, skrifver ingeniör Körner följande:

"För deltagarne i Kongressen 1915 skall minnet alltjämt framstå i förklarande glans. Men bakom de vackra minnena döljes en kärna af allvar: förpliktelsen för oss alla och enhvar att vidmakthålla och stärka de vänskapsband, som under dessa dagar knötos mellan svenska ingeniörskorporationer från båda sidor om oceanen. I Förenta Staterna uppgå de svenska ingeniörernas antal sannolikt till öfver ett tusen; och medräkna vi alla dem, som representera med industrien förbundna kommersiella intressen, torde siffran måhända mer än fördubblas. Att närmare sammanknyta dessa tusendes arbete och sträfvan med det gamla landet är ett stort mål, som kan blifva af vidsträckt betydelse ej endast för individerna, utan för det industriella och kommersiella lifvet i allmänhet inom de båda länder, som häraf beröras."

Å Västra Organisationskommitténs för Svenska Ingeniörs-Kongressen i Förenta Staterna 1915 vägnar:

> JOHN BRUNNER, Ordförande. C. G. AXELL, Sekreterare.

# THE YEARLY MEETING OF THE SWEDISH ENGINEERS' SOCIETY OF CHICAGO, JANUARY 29TH, 1916, AT THE SVITHIOD CLUB HOUSE.

The meeting was called to order about 9 o'clock in the evening: the President, Mr. A. P. Rissler, in the chair.

The minutes of previous meeting of the Society and of Board of Directors were read and approved.

The Chairman of the Lecture Committee, Mr. Victor Nicholson, read his report for the year. This report will be found in the Society's Membership and Year Book for the year 1915 and 1916.

Mr. Sven Holmes, as Chairman for the Library Committee, read his report, which also will be found in the printed proceedings.

Mr. S. G. Göranson, as Chairman for the House Committee, reported that arrangements were ready for the "Sexa" but that the business report could not be ready at this time. He therefore asked that his report be made at the February meeting.

Mr. C. G. Axell, as Secretary of the Convention Committee, read a report which will be found in the Membership and Year

Book. As that business was not yet finished a final report will be given later.

There was no unfinished business.

As new business the election of three members, to serve on the Nominating Committee for 1916, was taken up with the result that John E. Ericsson, Sven Holmes and G. A. Akerlind were elected.

The Treasurer, Mr. Axel Akers, read his report, which will be found printed in the Year Book.

Mr. George Nannfelt, as Chairman of the Auditing Committee, read his report, which will be found printed in the Society's Membership Book for 1916.

The Secretary read his yearly report, which will also be found in the 1916 Membership Book.

The present "Trasdockan" Committee was re-appointed for year 1916.

The President, Mr. A. P. Rissler, now thanked his fellow officers for faithful service and the membership at large for their generous support and co-operation, and in handing over the gavel to the newly elected President, Mr. John Brunner, wished him success for the coming year.

At a motion of Mr. Seaberg, a standing vote of thanks was given the retiring President, which vote, at a motion of Mr. John E. Ericsson, was extended to include all the officers for 1915.

The only new business taken up by the new President, Mr. Brunner, was the appointment of standing committees for year 1916, as follows:

Lecture Committee—Clarence Ongman, chairman, C. E. Carson and John Ericson.

Library Committee—Alef Cederoth, chairman, H. N. Parsons and Helge Nassen.

House Committee—Fred Seaberg, chairman, Sven Holmes and Erland Säfström.

The meeting adjourned for the banquet, and at the coffee, while Mr. Akerlind acted as toastmaster, most of the members of the new administration were called upon.

The President, Mr. John Brunner, in his speech gave some keynotes as to the aims and activities of the Society, as follows:

Mr. Toastmaster, Members of the Swedish Engineers' Society of Chicago, and Guests:—

In electing me to the office of President of our Society you have conferred upon me the greatest honor that it is in your power to confer upon any of the members of our Society, but with it you have also laid upon my shoulders the greatest responsibility you can place on any of our members.

In looking over the list of men who have so ably and faithfully served as presidents in the past, a feeling of hesitation comes over me from fear that I may not be able to keep up to the high standard they have set for the presidents of our Society. It will be only with your assistance and co-operation that I may expect to guide the Society on a safe course during the coming year.

In addressing you tonight, I will use as a text the second section of the Constitution of our Society, which reads as follows:

"The object of this Society shall be to promote knowledge, advancement and co-operation among the technical men of Swedish descent engaged in engineering and industrial occupations in Chicago and vicinity."

The object of our Society is clearly defined in this clause, but it is left to us, the members, to furnish the means by which it is to be reached.

Knowledge may be of a professional nature or it may be general. It may be handed down to us from the experience and observations of our forefathers, or it may be gathered from our own experience and observations. The knowledge which is given to us through the instruction in our schools and colleges is an accumulation of the experience and observations of man through centuries. This knowledge enables us to better fit ourselves for the duties we are to perform in the community but is insufficient for our success unless coupled with knowledge gained by ourselves through our own experience and observations.

The technical man requires a thorough technical knowledge in dealing with his work. He requires a general knowledge in his dealings with his fellowmen. Without being in possession of both, he can not make success in his profession.

Our Society has in the past promoted knowledge among its members by the presentation of papers at its meetings. This is in line with the work of other existing engineering and scientific societies, and is an effective method of conveying information and knowledge to the members of a society.

During the coming year we expect to continue this work to the best of our ability. It is my belief that these papers should preferably be prepared and presented by our own members, and that it should not be necessary to go outside of our Society for assistance except when something of unusual interest is offered by an outsider.

While the papers in general should be on technical subjects,

they should not be entirely limited to this class, as papers on other subjects are just as important and may be just as instructive and useful to the members. The engineering profession has, during the last half of a century, branched out in so many different directions and its knowledge has become so diversified and specialized that, at first thought, it may seem difficult to prepare technical papers which would be of interest to more than a limited number of our members, but on further consideration it should be found that we need general technical information in all lines of engineering, in order to broaden our minds and extend our knowledge and our power of judgment. I believe I am right in saying that we engineers in general are fairly well informed inside of our own particular field of engineering, but that we often lack much needed knowledge in other fields with which we only occasionally come in contact.

The technical literature of today is well developed and covers every field of engineering. The technical press is often ready to publish descriptions of engineering undertakings even before the engineers on the work has had time to collect his notes and prepare them in such a shape that they can be presented in the form of a paper before a technical society, but this should not prevent him from presenting his views and his experience on the subject to his fellow engineers. It is, therefore, the duty of the members of our Society to present to us papers on such subjects which they believe would be instructive to us and which would bring about discussion at our meetings.

Engineering is always in a state of evolution and new features of it appear right along. Many engineering problems which at times are believed to have been permanently solved are again brought up with new features presented and with new light thrown on them. It is of the greatest importance in an engineering society that all the subjects brought before it at any of its meetings be freely discussed. I feel that our Society has not properly developed this feature at its meetings, but it is my hope that, during the coming year, we may develop free discussion of the papers that may be presented. Many times facts and information are brought out in a discussion which are fully as important as those presented in the papers themselves. I hope that all the members of our Society will, during the coming year, do all they can to assist the Lecture Committee in its work, either by the preparation and presentation of papers on technical subjects of general interest to the members of our Society, or by discussions of the papers presented.

The technical publications of today are more complete and

better edited than ever before, and very little of general interest to engineers occurs which is not recorded in these publications. It should be the aim of every engineer to look through the technical journals and select such articles for reading which have reference to the line of engineering in which he is engaged or in which he is interested. By doing so, he will find that he can absorb and store up a large amount of technical knowledge which it would take years of experience to gain in his own practice. Our Society Room is well supplied with technical periodicals and the members of this Society should make the best use of them.

It should be to the interest of our Society to begin the collection of a reference library for the use of those of its members who are not in position to equip themselves with technical libraries of their own. The nucleus of a reference library for our Society might, perhaps, be started by gifts of technical books from the members of our Society, and I would urge that the members seriously consider this question and show their approval of the suggestion by donating books to the library. The Library Committee will appreciate your assistance and will be glad to receive suggestions in connection with its work.

Our Society has, in the past, arranged for excursions and visits to engineering undertakings and industrial plants, and I hope that we can continue to make similar arrangements during the coming year. Inspection of engineering work in process of construction and manufacturing plants in operation is usually very instructive to the technical man in general and one of the best methods by which to broaden his practical knowledge.

Our Society should also maintain among its members a broad and general knowledge of the engineering and industrial developments in our native country. This can be accomplished to a large extent by the studying of Swedish technical papers available at our Society Room and by communicating at our regular and informal meetings such news as may have been obtained concerning engineering and industries in Sweden. Some of us may forget that Sweden has developed during the last ten or fifteen year as fast, and in some lines perhaps faster than our adopted country. With its enormous resources of iron ore, forests and water power, and with its splendid technical educational institutions, it should continue to develop as fast in the future as in the near past and, perhaps, some day become one of the important manufacturing nations of the world. A beginning has been made to develop better and more direct transportation lines with this country.

We should, with our deeds and action, help to establish the best both commercial and political relations between our native country and the country of our adoption. Our Society has a great field before itself in this direction.

Our Society has another important function to fill which, even though it is not referred to in its Constitution, should not be neglected, and that is to assist in providing recreation for its members in the form of such entertainments as can be arranged within the means and tastes of its members. As this is a function which is not provided for in the Constitution of our Society, it must necessarily be earried out at the expense of only those who participate, and none of our Society's funds can rightfully be used for this purpose. These entertainments, which come under the supervision of the House Committee, require a large amount of work and thought. This is, perhaps, not as fully appreciated by all of the members as it should be. I wish to here say a good word for the House Committee and ask everyone of you to do your share in supporting them in their work.

At an early meeting of our Society, I intend to bring up before you for discussion some questions I have on my mind: namely, first, the advisability of adding a special membership committee to the already existing committees. The duties of such a committee should be to secure new members for our Society and advise the Board of Directors on the qualifications of applicants. Second, the advisability of publishing a monthly bulletin giving a summary of the activities of our Society and other matters of interest to its members. Third, the advisability of arranging for means by which unemployed members of our Society can be placed in communication with those who are employing technical men for their works or offices. These are questions which I believe are worth consideration, and which should be fully discussed in open meeting by the members of the Society, so as to bring out opinions as to their merits. They are, as far as I can judge, within the spirit of our Society's Constitution.

Our Society should stand for still another purpose, and this is, without doubt, to be counted among the most important of its work; namely, to assist the young Swedish engineers who come to this country to become good American citizens. The first duty of those who come here to stay is to prepare themselves for citizenship. Most of the Swedes that have come to this country in the past have made very desirable citizens, and while this condition will undoubtedly continue in the future, it should be the aim of this Society to raise the standard of its members in this respect

to a still higher plane. I consider this work to come within the spirit and provisions of our Society's Constitution.

I feel that our Society is, and should be, a Society principally for the young Swedish engineers living in Chicago, and that our work in the Society should be so conducted as to give them the fullest benefit from their membership in it, hence I can not close without giving a few words of advice to those of our members who have just begun their work in the engineering profession.

When a young technical man has finished his school or college training and starts out on his career in the engineering profession, he should make up his mind at the beginning that he is going into the game to win, and that in order to do so he must play it according to the established rules. He should understand that, in order to make a success in his profession, he must develop somewhat more than the average ability, judgment and endurance. The more his ability, judgment and endurance are developed above the average, the better are his chances for ultimate success.

During the first years of the young engineer's career he should devote all his spare time to the study of the branch of engineering in which he is engaged, so as to thoroughly familiarize himself with it in all its details. In later years he should study other branches of engineering as well, so as to broaden his views and knowledge and obtain a more general grasp of things. It is only through a broad and general knowledge, acquired both by study and actual experience, that a man is able to take the best advantage of the opportunities as they present themselves.

The young engineer must further train himself to make quick and correct divisions. To the well trained mind the first impressions are usually right, even if they, for the first time, lack proofs. Slow decisions often lead to vacillations in purpose and lead to waste of both time and money. If he has made his decisions, he should not hesitate but should concentrate all his efforts and energy on the work required for a successful completion of his undertaking. If he should find his decisions in error he should be ready to promptly adjust his work and actions to the conditions as they may arise. He should not be afraid to acknowledge mistakes made and should not, under any conditions, try to cover them up. They are bound to come to the surface sooner or later, and he will find it to his discredit to let someone else find them. No one can be 100% perfect; the man who claims he never makes mistakes does not do anything of value. We, however, must always aim at making our work 100% perfect.

In conclusion let me make another appeal to each and every

one of our members to do their share, be it large or small, in supporting our Society in its work. We can support it by one or more of the following means:

Attend its meetings whenever possible; Prepare and present papers at its meetings; Work in harmony in its affairs; Support it financially by prompt payment of dues.

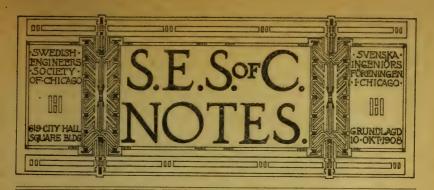
If we work together, we can build up our Society's strength and prestige. If we pull in different directions, we shall sooner or later tear down the structure of our Society. I believe it is clear to us all which course we ought to follow. Let us follow it for the sake of our Society's welfare.

Mr. Brunner's speech was received with great enthusiasm.

Among those present was the Society's first President, Mr. Henry Nyberg, who in his talk brought us back to the time when this Society was young.

A quartet of Svithiod Singing Society gave a number of songs. As usual "Trasdockan" was distributed and very much appreciated. The clever songs being sung alternately with the speeches throughout the evening.





JANUARY, 1917

# THE ANNUAL MEETING

WILL BE HELD AT

SVITHIOD SINGING CLUB
SATURDAY, JANUARY 27, 1917, AT 8 O'CLOCK P. M.

# **Business Meeting**

Reports from Officers and Chairmen of Committees for year 1916

# **BANQUET**

"TRASDOCKAN" EDITION DE LUXE

Members are urgently asked to fill in and mail at the earliest date possible the prepaid Postal Cards which the House Committee will send out in a few days. This being the only way to determine the number of seats to be ordered for the Banquet. A neglect to send in the Reply cards, marked "Yes" or "No," often causes a big economical loss to the Society.

# OFFICERS, 1917

Elected at the regular meeting, Dec. 16, 1916

PRESIDENT	 	F. W.	IGGBERG
VICE-PRESIDENT	 	CLARENCE	ONGMAN
SECRETARY	 0.	E. J. ABRA	HAMSON
TREASURER	 	J. J. S. G.	HLLBORG

#### BOARD OF DIRECTORS, 1917

Elected Dec. 16, 1916..........JOHN BRUNNER and G. A. AKERLIND Remaining Members. A. P. RISSLER, C. G. AXELL and PETER PARKE

## NOMINATION COMMITTEE, 1917

Elected Dec. 16, 1916....KLAS OLSON, H. WESTERBERG, C. A. BOLIN

#### AUDITING COMMITTEE, 1916

R. F. FOGEL S. S. GORANSON EMIL LINDBERG

#### **NEW MEMBERS**

John M. Anderson and Ernst Hjalmar Adamson.

#### DROPPED FOR NON-PAYMENT OF DUES

Joseph Berg, C. A. Austrom, Bror G. Haglind, Y. G. Anderson and Harry Ostergren.

1917



#### VÖRDNADEN

tör vår nye President hindrar oss att publicera de 22½ versifierade bidrag, som influtit, då dessa till största delen innehålla goda råd om hvad han INTE skall göra. Egentligen ha vi mottagit 23 sådana, men som hälften af en af dessa verser var poesi, kan denna hälft inte medräknas. Ett af de 22½ varieteterna vilja vi dock omnämna. Det innehöll endast 43 verser, skrifna på en "500"-kortlek för 4 spelare (se antalet "Officers"), med ett tydligt märke på baksidan af "Jokern". Således också där en hint om hvad han inte skall göra. På de 5 första uppmanas han att låta välja sig till president för de kommande 5 åren, på de nästa 10 beskrifvas i ytterliga detaljer en hönsgård, och på de 11te-13de kallas han "Högsta Hönset i Korgen" + en uppmaning att göra korgen STÖRRE och förse den med säkert handtag

samt "obräkbar båtten". Anvisningar huru viraborden, skrifborden och Directorsborden böra placeras och användas fylla No. 14-38, snuddande något vid fyllan. På den 39de hoppar författaren ur korgen upp till Publikationskommittén, som bör tagas vid öronen och inte tillåtas göra hvad den vill, utan endast behandla opersonliga ämnen, t. ex. huru att bygga tunnlar med endast en öppning, eller att göra knappnålar med spetsar i båda ändarna. Härifrån bär det i väg till det Preussiska enväldet och citeras Fredrik den Stores ord: "Jag är endast statens förste

tjänare", och med denna fångst hoppar han på de sista korten tillbaka i korgen och lofvar vår nye President, att OM han kan ästadkomma det där underverket med Korgen, skall han gå ner i vår historia som en annan

FREDRIK DEN STORE. Det sista kortet var Jokern

Du son af Abraham och någon Sara, du Sfinx, hvars leende är flickors fara, du tiger mest, men kanske skrifver mer. Och titeln "Sek." till skrifveriet ger den värdighet, du drömde om den gång en jubelkorus sjöng din campaign-song:

"You don't belong to the regulars, you are just a volunteer."



#### THE WESTERN ORGANIZATION COMMITTEE OF THE SWEDISH ENGINEERING CONGRESS IN U. S. A., 1915

submitted at the November meeting the final report together with the Treasurer's statement, signed by three Auditors, appointed by the Swedish Engineers' Society in Chicago, and a copy af the Memorial Book, to be filled in the Society's archives. The report was accepted and the Committee discharged. At the same meeting a special committee was appointed to be known as The Western Committee for Swedish Engineering Conventions, and it was further decided, that the membership of this Committee shall be not less than three, which shall be selected from the membership of this Society by the Board of Directors at their next meeting, in accordance with Section 9 of the Constitution and By-Laws of the Society. That this Committee is hereby instructed to carry out the recommendations made by the Swedish Engineering Convention in Chicago in 1915, and that it is to serve until the affairs in connection with the next Swedish Engineering Convention have been carried to completion and a final report of its work made and accepted at a regular meeting of this Society. That this Committee is hereby empowered to add to its membership, as may be required, Swedish engineers in good standing from

either the membership of the Society or from outside of this Society. That the majority of the membership of this Committee shall be from the membership of this Society. That, should any of the members of this Committee appointed to membership by the Board of Directors of this Society for any reason fail to serve, then it shall be the duty of the chairman of this Committee or, in his absence, the Secretary or other officer of this Committee, to report it to this Society, which, through its Board of Directors, shall fill the vacancy. That the Committee is hereby authorized to appoint its own Chairman, Vice Chairman, Treasurer and Secretary, but that these officers shall be selected from the membership of the Committee appointed by the Board of Directors of this Society. That the office of Secretary and Treasurer may be held by one and the same member of this Committee. That the Committee is hereby authorized to use this Society's rooms for its meetings and organization work. That the Committee shall make reports at the regular meetings of this Society."

Messrs. A. G. Akerlind, C. G. Axell and John Ericson were appointed at the following Board of Directors' meeting to serve as the three first

members on the new Committee.



Only ONE stop step more from where You now sit in the EASY Chair, So you should care What placed you there. Was it honor, you should be sorry! Was it "shelving," you should worry! For you did your share.

1917

VICE PRESIDENT

Gull-Borg låter bra, och bådar dålig tid för dem, som kroniskt ha försummat sin likvid. Och vår "Permanenta" lyx, vårt värn mot framtidssorgen, vi kunna lämna tryggt, det tycks, hos Gullborg utan borgen.



#### ENGLISH VS. SWEDISH.

My Dear Editor and Other Fellow Members, S. E. S.

Pursuant to the promise you wrangled out of me yesterday, that I write a few lines for our "Notes," in my usual rambling and disconnected way, it is only fitting that this should be written on the Pennsylvania Limited, where my rambling thoughts are in thorough harmony with the

rocking of the train.

"Hvarför skall du tvinga mig att sjunga, fast jag kan en liten visa jag?"—And echo answers: "Why? Perhaps because you think I ought to get something for the fees I regularly (?) contribute to the S. E. S. war chest. You are the only editor, I know of, who can get contributions to your publication and make the authors pay for the previlege of writing.

By the way, why do the contributors to our publications write in English, if we are a Swedish Society? My old father, to whom I send copies regularly, asked me that question. What would you answer?

I told him it was of no disrespect to the monther tongue, nor of respect to our (adopted) father tongue, but simply a matter of expediency. It takes a fellow twice as long to dig up the Swedish

synonyms of English trade words, dust them off, spell them correctly and use them right.

Are we ashamed of this fact? Not at all. We do it for a purpose. We know from experience that it is a detriment to us to be unable to talk and write English fluently. We don't want to be called "Swedes" because they don't pay "Swedes" as much, for one thing. Patriotism is all right, but bread is more important. So is butter.

But when it comes to saying, "Skål!" I am right there with the

righ accent and a nation-dry throat.

Hoping you are the same.

ASTOLF LEVIN.

#### THUMB-TACKS.

It is a regretable fact that most of our members, when through reading a book or newspaper, will lay it any old place regardless where it belongs. Why not put it in its place? As Engineers, we ought to show that we have some system about us, if nothing else.

At last, Bolin's manly feature are added to our art collection.

# NEXT SECRETARY A SOCIAL FAVORITE. (Special for the "Notes.")

Buffington, Ind., Jan. 15, 1917.—The next Secretary of the Swedish Engineers' Society used to live here and was always the guest at all the Pink Teas given by the Smarter Set. He ought to make a good Secretary.

#### "DU SKALL ICKE SVÄRA."

Det lär vara en lika stor fysisk omöjlighet för en normalt utvecklad människa att bita sig själf i nacken, som det är för en medelålders abborre att stä på ett ben för någon längre stund; men det är med ungefär sådana afsikter den Svenska Ingeniören vanligen inviger ett nytt år af fortsatt kamp för lifvet.

Intet offer tyckes honom stort nog, och det är med en uppriktig hänförelse han efter den obligatoriska tvagningen på årets första dag för-

djupar sig i ett allvarligt samtal med sitt bättre jag.

Ett nytt är! Lätom oss breda försonande slöja öfver det förflutna året

med dess många försvunna löften och brustna illusioner.

Minns du de mänga, mänga goda föresatserna du ämnade förverkliga i fjol: böckerna som du köpte, för att förkofra dig under lediga stunder, och de varma, sköna tofflorna, hvars speciella uppgift var att hålla dig hemma om kvällarna, och de.... men låt det förflutna vara glömdt. Tofflorna räcka ju nu till ett annat år.

Det var en gång en gammal man, som hade rest vida omkring här i världen och sett och lärt mycket, som vi andra människor aldrig komma

i tillfälle till att göra.

Han liknade lifvet vid en båt, som färdas på ett stort haf. Tankarna äro seglen och viljan styret. Förnuftet det är resenären och vinden är omständigheterna, som drifva oss rundt omkring här i världen till grönskande hamnar och till förrädiska skär, sade den vise mannen.

Ibland stormar det, och ibland blåsa milda vindar; ibland fryser hafvet till is, och ibland lyser solen försonande, värmande från en moln-

fri himmel.

Om då resenären samlar solsken som ballast i båten, kan han färdas

med lugn till resans mål.

Under sådana omständigheter, slutade den gamle vise mannen, böra vi fröjdas alla dagar under året, äfven om mörkret understundom ligger hindrande i vär väg.

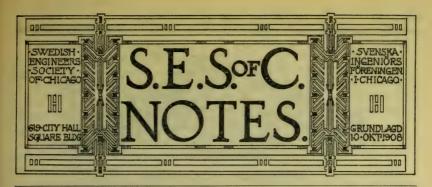
Ty allt hvad vi då behöfva att göra, är ju att glänta litet på för-

luckan och grina mot solen.

Och hvarje gång den Svenske Ingeniören invigt ett nytt år, minnes han den gamle vise mannens ord. Och molnen försvinna, solen skiner och lifvet ligger lekande, lockande framför honom. Och han ler. Ty lifvet är ju egentligen ganska löjligt.

äfven om man försvär sig emellanåt.

CETHA.



#### MARCH, 1916

## PROGRAM FOR MARCH. Dinner and Ball, March 18th.

When the Springtime on the hills is seen
And the sunshine melts the glitt'ring snow,
When the valleys take their robe of green
And the early flow'rs their faces show,
When from hill and plain comes a glad refrain,
Now that joyful life has come again
'Mid the fragrant air, all the earth doth sing,
Oh how wondrous fair is the newborn Spring.

To cite Spring poems may be too previous, but anything to attract your attention to the fact that the Swedish Engineers Society's annual Banquet and Ball will take place Saturday, March 18th, at the Swedish Club.

Now is the time for all good fellows to show their chivalry and take their ladies out for a jolly good time. Should you for any reason not have any fair creature, come yourself and help to entertain those of the others.

A special reception committee is appointed for the occasion and everybody will be taken care of.

Please send in your card early and let the committee know your intention.

HOUSE COMMITTEE.

## PROGRAM FOR APRIL. Regular Meeting, April 29th.

The Lecture Committee has been very fortunate in securing Mr. J. A. Rossiter to give an illustrated lecture on The Phillippines, Saturday evening, April 29th, at Svithiod Club House.

Mr. Rossiter who is at present Track Elevation Engineer for the City of Chicago, was for many years an Engineer for Uncle Sam in the Phillippines. He has a large number of slides illustrating various engineering projects of our Government in our island possessions as well as slides of general interest, so we are assured of a pleasant and instructive evening.

Don't fail to come and take this journey through the Phillippines with Mr. Rossiter.

We have not completed all arrangements for our lecture in May; but if present plans carry, we will have a "Humdringer" to announce in our April Bulletin.



#### NYINVALDA MEDLEMMAR.

D. M. Ackerlind. 517 42nd St. Rock Island, Ill.

J. O. Malmsten,

1127 Oak Grove Ave., Chicago.

F. M. Holmer,

7501 Saginaw Ave., Chicago.

- E. S. Johnson, 2846 Lyndale St., Chicago.
- E. Lindeblad,217 N. Desplaines St., Chicago.
- O. Rapp, 1443 Berwyn Ave., Chicago.

#### ARSMÖTET I JANUARI.



RSMÖTET hölls i Svithiods klubbhus, där de nya tjänstemännen installerades enligt häfdvunnet program. Sekreteraren för 1915, Mr. G. A. Åkerlind, ingaf sin årsrapport, hvilken åtföljdes af rapporter från stående och tillfälliga kommittéer.

Svensk sexa serverades med kaffe och "avec" och talenas mångfald aflöste hvarandra. Speciellt blef den nya presidentens kärnfriska tal mottaget med stor entusiasm. Detta jämte de ofvan nämnda rapporterna komma att inflyta i "1915 Year Book."

En qvartett ur Svithiod bjöd på sång och "Trasdockan" utdelades.

#### FEBRUARI-MÖTET.

Vid mötet den 19 februari, som hölls i Svithiods klubbhus, hade vi tillfälle att höra ett mer än vanligt intressant föredrag. Detta, som hölls af en amerikansk militär, Captain Clay, berörde ingående frågan om de just för närvarande så lifligt diskuterade försvarsrustningarna inom Förenta Staterna.

#### EXTRA MÖTE DEN 6 MARS.

Föreningen kallades till extra möte å lokalen i City Hall Square Bldg. för att öfverlägga om hvad som från föreningens sida borde göras med anledning af ett förslag inför Förenta Staternas kongress att resa ett monument till ära af John Ericsson. Mötet antog enhälligt följande resolution:

WHEREAS, There has been introduced in the House of Representatives of the Congress of the United States of America a bill to authorize the construction of an appropriate monument in the City of Washington, D. C., to commemorate the noble deeds of Captain John Ericsson, through whose genius and untiring effort the Monitor was constructed, and

WHEREAS, This bill is now before the Library Committee, advanced to public hearing on March 13, 1916, and

WHEREAS, We, the members of the Swedish Engineers' Society of Chicago, loyal and patriotic citizens of this the land of our birth or adoption, believe that the important services rendered to our country by Captain John Ericsson during our Civil War deserve, at the hand of our Government, a greater recognition than heretofore given, and

WHEREAS, The said Captain John Ericsson, through his deeds and work, set a glorious example to all citizens of the United States of genius employed in loyal development and defense of this country, and

WHEREAS, The present destruction of ocean commerce strongly brings to our minds the possibilities of the contemplated raids by the vessels which, through Captain John Ericsson's genius and work, were prevented from carrying out their mission, and

WHEREAS, We believe it is in the interest of public policy that ample recognition be extended to the memory of the said Captain John Ericsson: therefore

BE IT RESOLVED, That the Swedish Engineers' Society of Chicago, a body of representative citizens, most earnestly appeal to, and urge upon, the Library Committee of the Congress of the United States of America favorable action on the bill as presented..

BE IT FURTHER RESOLVED, That a copy of these resolutions be transmitted to the Library Committee, and copies sent to the United States Senators from the State of Illinois, and to the Members of the House of Representatives from Chicago.

#### BOOST THE SOCIETY.

Mr. Fellow Member:-

The Swedish Engineers Society of Chicago is the second largest society of engineers and industrial men of Swedish birth founded outside of Sweden and includes is its membership many capable, energetic and experienced men in Chicago and vicinity as well as in other parts of United States and Canada.

Its aim is to promote knowledge, advancement and co-operation among technical men of Swedish descent, engaged in engineering and industrial operations in Chicago and vicinity.

Will you assist us in continuing this progress by telling your friends who are still outside of the fold of the desirability of membership?

Since the organization of the Society, in 1908, the increase in membership has steadily grown during the past years. In year 1909 we counted 74 members, in 1910 120 members, in 1911 179 members, in 1912 209 members, in 1913 254 members, in 1914 265 members and in 1915 276 members.

Think of the many advantages:

To be named with a progressive and representative Society of Swedish men, engaged in an engineering or industrial pursuit, of reputable standing.

To become better acquainted and make yourself better known among the members, as you will at the meetings and at the annual banquet.

To hear and discuss papers presented at the meetings.

To be in a position to partake in trips to many industrial establishments arranged for during the summer months.

To get the advantage of reading Swedish papers, books and technical periodicals on hand in our library.

To enjoy the pleasures which are in store for us through the active work of our House Committee.

To receive the monthly bulletin of S. E. S., giving many points of interest in its activities.

To be in a position to give a helping hand in securing work for an unemployed member. To avail yourself of the advantages of using the down-town office of the Society as a resting and a rendez-vous place.

Enumerate a few of the advantages listed above, which cannot fail to impress those having a desire to become a member, and then say it is not worth 50c. per month or \$6.00 a year, which is charged as a membership fee for active members. For corresponding members the dues are only \$2.00 a year and for associate members \$4.00. The admission fee is only \$2.00.

The Committee will appreciate the co-operation of all members in bringing the above to the attention of all non-members in order that there may be no hesitancy in joining the Swedish Engineers Society of Chicago. You are earnestly requested to assist in our work of obtaining new members by returning the application blank sent to you with February bulletin, properly filled in, and to help extend the influence of the Society by submitting names and addresses of all Swedish men of which you know, engaged in the industries or in an engineering capacity.

Very respectfully, yours

MEMBERSHIP COMMITTEE.

#### THE LIBRARY.

The following donations have been made to the Society's Library during the months of January and February:

By Mr. John Brunner:

Living Races of Mankind, by H.N. Hutchinson; Budapest the City of Magyars, by F. Berkely Smith; Railway Transportation, by Chas. Lee Raper;

The Story of the Railroad, by Cu Warman;

The Modern Railroad, by Edward Hungerford;

The Earth, IIts Genesis and Evolution, by A. T. Swaine;

Reinforced Concrete, by A. W. Buel and C. S. Hill; Ordinary Foundations, including the Cofferdam Process for Piers, by C. E. Fowler;

Sewerage, by A. Prescott Folwell:

Properties of Steel Sections, by John C. Sample;

Heat Treatment of Steel;

The Metallography of Iron and Steel, by Albert Sauveur;

The Mechanical Engineer's Pocket-book, by William Kent;

Nystrom's Pocket-book of Mechanics & Engineering; By Mr. L. G. Waessman;

Love of Life and Other Stories, by Jack London.

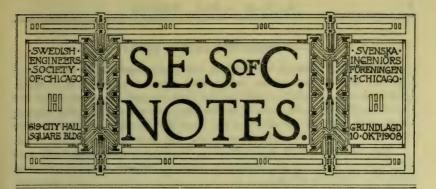
We gratefully acknowledge receipt of the above gifts and sincerely hope that ALL the members in the future will show their interest in the building-up of our library by adding more books and publications to the same.—"Do it today!"

A. CEDEROTH. Chairman Library Committee.

These "NOTES" will be issued once a month except the months of July and August.

The vice president, the secretary and the chairman of the Lecture. Library, House and Membership committees are appointed members of THE PUBLICATION COMMITTEE.





**APRIL**, 1916

# SATURDAY, APRIL 29, 1916,

at 8:00 P. M., the Society will meet at Svithiod Club House, 624 Wrightwood Avenue, and as previously announced, Mr. J. A. Rossiter, formerly U. S. Government Engineer in the Philippines, will give an illustrated lecture on the Philippine Islands, their natural resources, engineering projects, etc.—Board of Directors will meet af 7:30 P. M. sharp!

After the meeting "Sexa" will be served at One dollar a plate.

As an extra attraction a member of the Society will during the evening exhibit a number of samples of a new "war industry" in Sweden, which will illustrate one of the remarkable effects caused by the present extraordinary conditions in the neutral European countries and will indicate some of the readjustments of demand and supply which will be manifest after the war is ended.

#### PROGRAM FOR MAY.

The ordinary May meeting will be held Saturday evening, May 27th, at Svithiod Club House. Detailed program for that night will be announced in the May "Notes."

#### MEMORIAL TO JOHN ERICSSON.

In response to the letters sent to the United States Senators from the State of Illinois, and to the Members of the House of Representatives from Chicago, with copies of a resolution adopted by the Society on March 6, 1916, urging an appropriation for the erection of a monument to John Ericsson in Washington, D. C., the Society has received very courteous replies, with the assurance that the measure will be given favorable consideration and attention. The Society is also in receipt of the minutes of the hearing regarding memorial to John Ericsson before the Committee on the Library, held March 13, 1916, at which meeting several prominent Swedish-Americans spoke and asked for the passage of the bill.

#### THE SOCIETY'S LADIES NIGHT.

The Society's annual banquet and ball, which was held at the Swedish Club the 18th of last month, was a well attended and successful affair. It seemed that everybody there had the time of their life. The music had to play until 3 a. m. to satisfy the dancers, and there is a rumor floating around that some of the members got home just in time to attend Sunday evening services; however, this rumor may not have any foundation at all.

The financial result is satisfactory, inasmuch as the committee does not have to draw on the Society's treasury for any incurred expenses connected with this affair.

A hearty thanks is extended to all members and their friends who helped to make this affair a success,

Respectfully,

HOUSE COMMITTEE.

#### GAFVOR TILL FÖRENINGENS LOKAL.

Några vänner till f. d. sekreteraren hafva godhetsfullt skänkt till föreningen ett väl utfördt större fotografi af herr G. A. Åkerlind. Porträttet, som har en mycket lyckad likhet med originalet, hänger nu till allmänt beskådande i en smakfull ram på kontoret.

Vi hafva äfven nyligen fått mottaga från Kongresskommitten, två större gruppfotografier från kongressen i Chicago förliden höst.

I detta sammanhang förtjänar nämnas, att föreningen för något ar sedan inköpte ett mycket vackert och dyrbart fotografialbum i hvilket den ämnade samla amatörfotografier af allmänt intresse. Meningen var att försöka få medlemmarna att insända bilder antingen sådana de själfva hade tagit eller andra hade tagit af dem, så att vi till slut skulle få en stor samling af illustrationer från den svenske ingeniörens lif i Amerika.

För att insamla och ordna de eventuella bidragen tillsattes en särskild kommitté, men förmodligen dog denna en ganska naturlig själfdöd vid början af sitt arbete, ty f. n. ligger det skinnbeklädda albumet dammfylldt och förgätet på en ensam hylla.

Skulle någon hafva antingen films eller kopior, som han är villig att skänka till det nu så illa behandlade albumet, är han hjärtligt välkommen.

Föreningens bibliotek har under den senaste tiden fått mottaga gåfvor från ingeniörerna John Brunner och Fredrick Hellman, hvilket härmed tacksamt erkännes.

#### POSITIONS OPEN.

TWO TOOL DESIGNERS. Positions open at Raleigh Manufacturing Co., 2437 W. 14th St., Chicago. Ask for Messrs. Adler or Heiser.

STRUCTURAL STEEL DRAFTSMEN. Apply to Mr. M. J. Eichhorn. Sargent & Lundy, 72 W. Adams St., Chicago.

#### NOTICE FROM THE TREASURER.

All dues are payable in advance. Statements have been sent to all members in arrears. Checks and Money Orders should be made payable to the S. E. S. of Chicago and mailed to 619 City Hall Square Building.

AXEL AKERS, Treasurer.

#### BOOST THE SOCIETY.

In the March issue of these "Notes" an appeal was made by the Membership Committee to all members of our Society to help the good cause along by making our Society better known in regard to its aims, activities and characteristics and to particularly direct their efforts toward getting desirable new members.

This question of extending the membership is always a serious one with all societies particular about maintaining the high standing once achieved, and it is our intention by these appeals to increase the quality of our membership as well as the number.

All of us are no doubt aware of the fact that few of us would SEEK membership in a society like ours, but that we have been lead to it by members, and in many cases that leading has meant persistent personal work. It may be argued, that if persons are indifferent to the objects of the Society, such persons could not be desirable as members, but such indifference may be due to lack of understanding and in some cases to old prejudices, and it is for us to remove those.

We have in this city and its environs a number of Swedish industrial men, whom we have been fortunate to secure as members, and who in no small degree have helped to make the Society what it is, but a great many more such industrial men we would like to welcome into our Society, and we therefore hope that those members would bear in mind to put in a good word for the Society and write to the Secretary or the Membership Committee, giving name and address of such men who in their opinion would be desirable members.

There is another group of candidates to whom we also should pay particular attention. There are a number of young Swedes and perhaps even a larger number of young Swedish-Americans who for some sufficient reason have not been able to finish their technical school education, but are serious enough and ambitious enough to try to work themselves up to become engineers. Such young men we welcome, and it is clear that just such are likely to benefit most by the association with engineers who have started as they have done and in many cases succeeded as they hope to do.

As we said before, it is important that our membership should not be increased at the expense of its quality, and if any member meets a case where he is doubtful please communicate with the Secretary or the Membership Communitee before approaching such prospective candidate.

Very respectfully,
MEMBERSHIP COMMITTEE.





MÅNGA ÄRO KALLADE .

#### GLEANINGS FROM THE BALL.

Did you see our Secretary? He was adorned with a large cane. Some sport, hey!

Our ex-Presidents shone with a brilliancy only eclipsed by the sun as seen at 2 a.m.

Henry was there, though.

The chairman of the Library Committee must have been hit on the head with one of the books he was seen carrying in the last Bulletin, he did not show up at the ball. "Oh, you Regina."

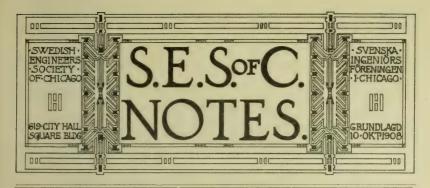
Karl Henrik was absent, so was Clarence. "Wonder Why."

One of our members thinks he has been maliciously treated of late, he threatens to join the Salvation Army or the Rough Riders or else teach a class in Sunday School. Cheer up. Join the House of David!

Prince John E. was there, of course, and so was baby brother Charley.

The South Side Nightingales rendered some of their well known selections, beautifully, as usual, although one of their members has migrated north.

The Publication Committee will always be very glad to receive contributions from the members for our "Notes," and though our space is limited we will in the future reserve one page where members at all times will be able to publish and discuss matters of mutual interest. Lectures and sermons, biographies and obituaries, speeches and just-common-sensetalk; it will all be welcomed as means of making our paper more interesting and valuable. Send communications to



#### SEPTEMBER, 1916



On our annual Crawfish Party, which is going

to be held at the Swedish Club, Saturday, Sept. 23rd, at 7 p. m. sharp, we expect to meet everybody that is able to be about.

Besides the fine supper, for which the Swedish Club is famous, there will be shown colored moving pictures of the steel mills in Gary in operation, so everybody will be able to get an idea how steel is made. Everything of interest will be shown and explained, so you can get a clear understanding of how all kinds of steel products are fabricated. Be sure to be on time. Supper will be served at 7 p. m. sharp. After supper the pictures will be shown, and then we will dance!!!



## JOHN ERICSSON-MONUMENTET

Förenta Staternas kongress har anslagit \$35,000 till ett nationalmonument att resas i Washington.

"Det är nu fyra år sedan," skriver sekreteraren i The American Scandinavian Alliance Mr. Carl E. Bohman, "som vi först åtogo oss upp-



draget att arbeta för detta mål. Det såg flera gånger hopplöst ut, särskilt vid tanken på att flera misslyckade försök redan under de flydda 50 åren gjorts. Men det var på grund af det förträffliga understöd, som från alla håll i landet kom oss till del. som segern nu är vunnen. Kraftigt understöd och stort intresse för saken visades vid den 'Public Hearing', som hölls i Washington den 3 mars i år, då flera svenska sam-

JOHN ERICSSON hällen i vårt land voro represente-rade genom sina allra bästa män. Bland amerikaner, som understött arbetet bör särskilt nämnas kongressmannen John J. Fitzgerald, förre kongressmannen William M. Calder, båda ifrån Brooklyn, och senatorn Moses M. Clapp ifrån Minnesota. Senator James A. O'Gorman från New York var visserligen den, som i senaten väckte sista förslaget, men den som i första hand förtjänar det svenskamerikanska folkets tacksamma erkännande är senator Clapp.

Hur snart denna staty blir färdig och kan avtäckas är icke gott att säga nu, men vi hoppas att till den stora avtäckningsdagen kunna ordna så att Sverge blir representerat av någon kunglig person och sänder hit något krigsfartyg. En utförlig rapport över alla erhållna medel och huru

de använts, kommer att utarbetas om några dagar."

#### "VACATION"-

perioden är slut och en massa fotografier tagna. Glöm inte vårt album för amatörbilder. Bibliotekarien består gärna det nödvändiga gummit.

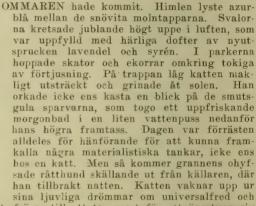
Send in any change in business or residence address to the "NOTES."

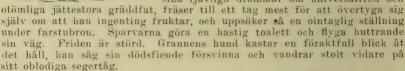
#### THE EXCURSION

on the Chicago River and the Drainage Canal, which was intended for the last week in August, has been postponed to some later date, when no "hot spell" may be feared to spoil the trip, which under right weather conditions is sure to be both very pleasant and very interesting.

# SOMMAR

ETT DILLERI.





Då ingeniören ungefär tre timmar senare vaknade upp från sina oroliga drömmar, stod solen ungefär mitt på himmelen och alstrade en värme, vars

like han endast hört omtalas vid sina enstaka besök i kyrkor och bönhus. Biffstekarna från gårdagens seglivade drabbning skimrade som millioner matematiska punkter för hans Flågula svenska ögon, och chot av det känslosamma rienoblinbet ljöd lik en själaringning i hans öron. Stämningen var försvunnen. Så även musikanten. Guskelov.

tet "Never again" och går ut för att söka svalka.

Det är söndag i Chicago. Förföriska skyltar realistiskt målade, iskalla seidlar pråla i vartannat gathörn.

AKE VIEW CLOSED SALOON Ingeniören svär ett bruingenioren icker inte om Söndagarne"\_ Men ingeniören Då fuktar han endast sin själ. Han

dricker icke. Om söndagarna, I Ingeniörsföreningens rikliga bibliotek frossar han och finner



riklig näring för sin tänjbara hjärna. Men det var sommar. Tibets och Saharas ökenvindar äro såsom ljuveliga pustar, jämförda med den atmosfär som stöter en till mötes i våra egna biblioteksrum. Försök gjordes en gång att mäta värmen i detta Muspelhem, men den finkänsliga termometern gick upp med en så stor hastighet, att den några dagar därefter påträffades på den tjugonde väningen. Den hade då sökt tillflykt i en sval rockficka.

Även telefonen, som annars alltid varit ett så trevligt sällskap, började få kännningar av värmen och nekade att mottaga ordentlig föda utan insisterade på plåtbitar och byxknappar, varför det var nödvändigt att sända den till ett mildare klimat. Till stor saknad. Nästa gång blir det böckerna, som nu stå och torka tillsammans i brist på bildat umgänge — och alla presidenter och grundläggare som hänga på väggarna och gå upp i limningen.

Sedan kan ingeniören sitta där och "kallprata".

Det var sommarafton i Chicago. En svag bris krusade Michigans vatten och gled sedan smekande genom staden. Solen sjönk blodröd i väster, och de höga husen kastade eftersökta, jättelika skuggor över Grant Park. Blommorna reste sina stänglar efter en ihärdig men ojämn strid mot hettan. Människorna började andas.

Grannens hund kommer hemlunkande utmed husväggen med hängande tunga. Katten ligger på trappan och lurar på en liten husråtta. Natten är inne.

Ingeniören går ut för att se på månen.

CETHA.



#### THE WILSON AVENUE TUNNEL EXCURSION

in July was, in spite of the hot weather, a very successful event, and we are happy to announce that a lecture on this same subject will be given before the Society at the October meeting by Mr. Henry Claussen, engineer in charge of the Construction Division. This lecture, which will be accompanied by numerous slides, was given before the Western Society of Engineers.

## GUSTAF A. M. LILJENCRANTZ

avreste från Chicago den 31 sistlidne augusti till Sverge för att där tillbringa sin levnads höst. Medlemmar af Svenska Ingeniörs-föreningen, som hade ämnat hedra sin förre president och första hedersledamot med en avskedsbankett, vilket dock ingeniör Liljencrantz avböjde såsom alltför tröttande för hans höga ålder, hade samlats vid avresan från Union Depot och med kraftiga hurrarop önskade honom lycka på resan.

Baron Liljenerantz, som arbetat för U. S. Government i icke mindre än 45 år, var född i Upland för 74 år sedan och lämnade Sverge 1870. Dessförinnan hade han tjänstgjort som kammarjunkare vid Carl XV:s hov och såsom ingeniör vid byggandet af Dalslands kanal. Sista gången han besökte fäderneslandet var för 28 år sedan. Adress i Sverge: Djursholm.

#### NEW MEMBERS.

Karl Hawkins, active member; N. P. Sjobring, active member, and Axel G. W. Wedberg, corresponding member.

#### RESIGNED.

Lars M. L. Thorson.

#### CHANGED ADDRESSES.

B. Johnson, Chile Eploration Co., Chuquicamata, Chile. L. Lindgren, 10 W. 101 St., Apt. 25, New York City. Carl Bergquist, Argo Corn Products Refining Co., Edgewater, N. J.

## DROPPED FROM THE LIST OF MEMBERS.

Bernie Larson, D. T. Björk, G. G. Ehrenborg, and J. Attila.

# THUMBTACKS

Our Secretary is back from the "Wild and Wooly West," where he went Indian hunting. He reports the sport is too tame, so he is glad to be back in Chicago again.

Ex-pressman Lundquist is on the stump, or in other words has taken a position as orator. Go to it, Hjal.

Charles Engwall has joined the "Allies."

Since his wonderful invention of "Spröjten," the Chief Editor of "Trasdockan" has led a quiet life, but now his activities have taken a new tack. He has accepted a lucrative position as pencil pusher, and we expect to hear of some great achievements.

The Society's "English Beefsteak Party" did not make much of a hit. Everybody is pro-German, that's the reason.

Emil Lindberg went bear hunting and fishing in Northern Wisconsin All he got was a big head and some mosquito bites; in order to make up for lost excitement he got desperate and ventured into the matrimonial game, so now it is no end of excitement.

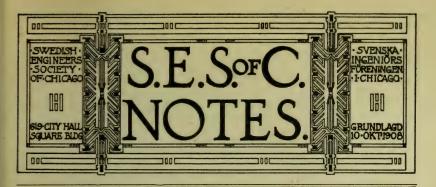
Our esteemed Treasurer is going to quit politics. He is going to enter the war game.

Alfons is back to civilization again. Clark street looks mighty good to him just now.

Among the subscribers for "Ladies' Home Journal" we note our friend Göranson. Wonder what he is up to now? Studying needlework or something?

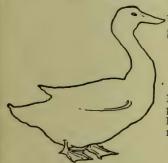
Have you seen George Axell drive a "flivver." It's a sight.

Murder will out; also Seaberg's hidden talents. Read the Thumbtacks.



NOVEMBER, 1916

# The November Meeting



will be held at Svithiod Singing Club, Saturday, Nov. 25th, at 7 o'clock sharp.

Business Meeting and Ladies' Night,

Thanksgiving Dinner and Dance.

Maten blir god på Sviti-od En kalkon minst per person. Dansen blir fart i, musiken den bästa, vid vårt Thanksgiving party, lördag den nästa.

(Annons.)

#### THE LAST MEETING

held at the Swedish Club, October 21st, gave us the pleasure to listen to a very instructive lecture by Mr. Henry Clausen on the construction of the Wilson Ave. tunnel. The lecturer, who illustrated his talk with about 125 lantern slides, was given a standing vote of thanks.

At the business part of the meeting was read a report of the financial standing of the Western Organization Committee for the Engineering Congress, Sept. 1915. At the request of the Committee, the Society appropriated the sum of \$51.38, to cover a deficit, shown in this report.

At a motion from the House Committee, it was decided to omit the lecture at the regular November meeting and instead invite members with ladies to a Thanksgiving dinner.

The "Trasdocka"-committee reported that the work on the January issue had been started and promised a still more interesting number than the last. The Society's thanks to the Committee was extended, followed by lively applause.

A contribution had been asked for by the American-Scandinavian Alliance of Greater New York to help cover the expenses in connection with work done for securing an appropriation from U. S. Congress for the John Ericsson Monument. A collection among those present gave \$25.50, of which \$25.00 was sent at once. The collection continues.

Among guests for the evening were, Fredrik Weidling from Sweden and Mr. Ernst Ohnell from New York.

A splendid "Sexa" was served, and speeches were plentyful, mostly of a political character, due to the pending national election.

#### NEW BOOKS.

The Library Committee has received the following two books as a gift from the Committee for "Trasdockan":

> Upside Down Farm, by Astolf Levin; Tobacco Leaves, by W. A. Brennan.

We hope that "Trasdockan" will keep up her good work and add many more books to the Library. We need them

#### RESIGNED.

Dudley F. Holtman.

#### BESÖK.

Astolf Levin var i Chicago den 11 och 12 november för nytta och nöje.

#### NOTICE.

At the end of this year the Society will dispose of old copies of engineering magazines now stored away in the Library rooms, and if any of the members would like to secure single copies or articles of special interest, printed in these magazines, they may be able to do so by communicating with the LIBRARY COMMITTEE. by communicating with the

#### A HINT TO THE LECTURE COMMITTEE.

Why not get a 300-watt nitrogen-filled lamp for the Stereopticon and avoid trouble and delays and swearing and darkness?

ONE WITH WEAK EYES.

#### NOMINATION FOR OFFICERS, 1917:

For President—F. W. Iggberg, Klas O. Olson.

For Vice-President-Clarence Ongman, Axel Karlsteen.

For Secretary-O. E. J. Abrahamson, Hugo Westerberg.

For Treasurer-John S. Gullborg, Helmer Dedering.

For Board of Directors-John Brunner, A. G. Akerlind, Sven Holmes, C. F. Anderson,

#### Send In Your Ballot Early!

Watch the Next "NOTES"-Campaign Number!

Election will be held at the regular December meeting.

#### EX LIBRIS.

En pristäflan utlyses härmed bland de många tecknarna inom föreningen för uppgörandet af ett Ex-Libris för biblioteket. Ett pris bestående af en äkta, oförfalskad tiodollarssedel kommer att utdelas till insändaren af den bästa, antagbara teckningen. Bidragen böra sändas in före den 9 december, och resultatet flommer att tillkännagifvas i nästa nummer af LIBRARY COMMITTEE. "Notes." Adressera

#### OUR OWN BUREAU OF INFORMATION.

#### Founded 1916.

New Member. Central 6088 (out of order).

J. E. E. No independents running, to our knowledge. S. G. G. No, there are no ladies allowed on election day

Why-No, the Swedish Engineers' Society is not a political K. G. society. Who said so?

John. No, Iggberg hasn't been president-as yet. Yes, Charles Engwall is still a member.

G. A. Yes, a majority of votes is required.

V. S. Yes, you will get a drink to the turkey at Svithiod the 25th. But that's all. · CETHA.

#### EN KOMMITTÉ

är merendels sammansatt af en "vise", några få arbetare och resten drönare. Ibland händer det att visen också måste fungera som arbetare, i brist på sådana, och då benämnes resten af sammansättningen drönare eller "non-producers". Det finnes många inom industrivärlden som vilja klassifiera ingeniören i allmänhet under den sista benämningen, men det motsätta sig flera af oss på det bestämdaste. Men så kan det ju finnas kommittéer utan några drönare, i hvilket fall verksamhetsgraden af kommittén i fråga betydligt stiger öfver den normala.

Alla kommittéer ha sin vise, vanligen kallad chairman, så långt kan jag tryggt uttala mig. Det är visens skyldighet att sammankalla, så ofta han har något af vikt att diskutera eller uträtta. Med denna kallelse medföljer vanligtvis såsom en lockelse att ej skolka den upplysningen, att "drottningen" eller den så kallade "bättre hälften" vill ha middagsbordet dukadt och att möjliga diskussioner komma att bli allt annat än "torra". Under sådana omständigheter vågar jag påstå att alla medlemmar komma att infinna sig mangrant. Så ätes och drickes och talas och planeras och så till sist har uppgjorts ett program, och kommer så beslut om hur det och det skall uträttas och hvem skall blifva den "lycklige" att få uppdraget om hand. Och i de flesta fall blir det "vice" värden som är den "lyckligt" lottade att bli utsedd till förespråkare, arrangör, referent eller hvad helst angelägenhet uppdraget föreskrifver. Han bör vara tacksam att hafva blifvit visad ett så stort förtroende af sina medbröder

Här är Publikationskommittén: \* Den består af sex medlemmar, den mångtaligaste af dem alla, men icke förty kallades skrifvaren att bidraga för nästa publikation. Såsom en uppmuntran lofvade visen (märk väl, i denna kommitté behöfver han ej arbeta) att bidraga till denna utmärkta upplaga med att adressera alla kuverten. Ja, äfven små bidrag böra mottagas med tacksamhet. Arbetet i denna kommitté är annars ganska väl fördeladt och dess medlemmar äro allt annat än drönare; men så är den ju sammansatt af alla de vise från de öfriga kommittéerna, och för en vise att bli drönare är ju en rent fysisk omöjlighet.

Så är det Medlemskommittén: Ändamålet med denna kommitté är, att den skall försöka värfva nya medlemmar för föreningen, äfvensom att verka såsom en slags undersökningsnämnd för styrelsen i godkännandet af inträdesansökningar. Jag tror inte den haft så särdeles stor framgång i ökandet af medlemsantalet, men därför är det ju inte sagdt att

dess medlemmar äro drönare.

Det är mera troligt att de personer, som blifvit inbjudna till medlemskap i vår lifskraftiga förening och ej hörsammat kallelsen, äro bättre lämpade för den benämningen. Som sagdt, vi skola hoppas att alla med-

lemmarna på denna kommitté gjort sitt bästa.

Så är det Bibliotekskommittén: Dess förnämsta arbete består i att lägga tillbaka tidningar och tidskrifter på deras respektiva platser efter medlemmar, som ej veta hvad menas med ordet ordning. Jag undrar, om de verkligen skulle kunna hitta på den idén att en bok eller tidning bör läggas tillbaka på den plats den togs ifrån, i händelse att någon bibliotekskommitté ej funnes att stå dem till tjänst.

Förutom detta har kommittén just ingenting annat att göra.

Så komma vi till Kommittén för anskaffande af föredragshållare: Det måste vara en jädrans obehaglig syssla, för hur pratsjuka vi än må vara vid det långa bordet, så tar det ändå en del kurage att stå upp och prata ett par timmars tid utan uppehåll inför våra skarpa kritiker inom kluben; och detta är tydligen orsaken hvarför kommittén ser sig nödsakad att skaffa förmågor utom föreningen.

<sup>\*</sup> Dess göromål skall bestå i utgifvandet af en månatlig bulletin, innehållande notiser om möten, referat öfver föredrag, namn på nyintagna medlemmar, äfvensom på sådana vi nödgats stryka, samt hvilka andra notiser medlemmarne kunna anses hafva intresse i att blifva delgifna.

GLÖM INTE att skicka in SVARSKORTET genast till huskommittén.

— Dagen är den 25te november.

Men ett allvarsord åt klubbens medlemmar i allmänhet och särskildt dem, som ännu icke låtit mossan börja gro öfver geniknölarne.

Tveka inte att skrifva något. Tag ert eget fack, inom hvilket ni bör bäst vara hemma, och börja en liten uppsats och finn ut hur mycket det ännu finns att lära därom, ty först när ni skall plantera er kunskap i svart på hvitt, finner ni ut hvad som fattas i er bildning. Helt naturligt slår ni upp er textbok, letar reda på en teknisk tidskrift, eller går upp på biblioteket för att få tag på den rätta lösningen, och inom kort har ni en utmärkt liten uppsats, som vi alla skulle vara glada att få lyssna till. Men det är icke så mycket vi som vinna så särdeles på att lyssna till er utmärkta uppsats; ni själf, om ni gått in i saken med noggranhet, är vid färdigskrifvandet full af en sädan massa nya och nyttiga lärdomar, att ni kommer att känna er redan hafva fått full ersättning för edra bemödanden, äfven om ni icke skulle komma i tillfälle att få delgifva oss edra erfarenheter. Ja, tänk på saken och glöm inte hur angenämare det skulle kännas för föredragskommittén, om den någon gång kunde skryta med att hafva lockat fram de dolda skatterna inom oss själfva. Erbjud eder frivilligt, utan pock, och se vår vän Ongmans ansikte skina af förnöjelse.

Kommitten i sin helhet har varit mycket verksam, det medgifva vi, men den har i de flesta fall måst finna volontärer utom föreningen. Nu rekommendera vi, att den lägger all sin vinning i att öfvertala medlemmar

att blifva de ledande för framtiden.

Så till sist komma vi till Huskommittén: Den är, enligt min mening, den viktigaste af dem alla, for hur skulle annars en förening af svenska ingeniörer kunna hållas samman, om inte för en kommitté, som kan efterse deras lekamliga och sociella välbefinnande. Den arbetar så oegennyttigt, men vinner så föga erkännande för sina bemödanden.

Låt mig här numrera några få punkter, om hvilka medlemmarne kanske äro i okunskap, men hvilka, om de strängt iakttagas af alla, skulle kännas som en alldeles tillräcklig belöning för våra sträfvanden. Jo.

nämligen så:

Vi annonsera för en s. k. damernas afton, vi annonsera därom i vår bulletin såväl som sända individuella inbjudningskort, och när aftonen är inne infinna sig endast ett fåtal. "The more the merrier", är ett ordstäf som alltid häller streck, så hvarför inte en och hvar af Er arrangera det så, att Ni kunna taga del i våra sociala aftnar och därmed hjälpa oss förhöja stämningen.

Då vi ha fäst och fröjd och glam, att sitta hemma allvarsam, att sitta ensam vid sin spis, är ej att vara klok och vis; men att ta på sin bästa skrud, det bättre är, det vete Gud, och gladlynt lunka från sitt tjäll till klubben på en sådan kväll; att vara med, då vi ha fäst — nog är det

sannt att det är bäst.

En annan sak som gärna vill ut, och det i så stränga ordalag som jag vågar använda. Vi sända alltid tillsamman med någon inbjudan ett stämpladt brefkort med begäran om att bli underrättade, om Ni kunna komma eller ej. Det kostar er inte mer än tiden för att fylla i ja eller nej och ert namn och därefter lägga kortet å posten, men icke förty få vi sällan mer än tio procent af de utsända korten tillbaka. Förstå Ni ej att vi måste garantera ett ungefärligt antal deltagare, och hur i Herrans namn skola vi kunna gissa oss till hur många ämna komma, om Ni ej gifva oss en hint därom? Tänk om det skulle falla alla andra, liksom Er själf, i sinnet i sista minuten att infinna sig, då kanske Ni komme dit och funne att fästen blifvit uppskjuten på grund af...ja, på ingen annan grund än af Er egen tanklöshet. Så gör oss därför den tjänsten att hådanefter alltid fylla i korten, antingen Ni ämnar komma eller inte, och det utan uppskof, samt returnera dem till oss.

Angående verksamhetsgraden af denna kommitté kan jag af helt personliga skäl ej uttrycka mig, men ett är sannt, att vi göra vår plikt och det så godt vi kunna. Vi skola hoppas, att medlemmarne i sin helhet också vilja göra detsamma, och jag vågar förutspå en betydligt ljusare framtid för vår förening.

EKONOMI.

Tacksägelsemötet om lördag kostar så litet, så det kostar mycket mera på att stanna hemma.

# Anno 1936



Aldrig har solen strålat klarare och aldrig har Chicago klädt sig i en mer hänförande dräkt än i går, då svenskarna firade en af sina mest ärorika stunder: invigningen af Svenska Ingeniörs-Föreningens nya hem

Mänga är hade det tagit och långa, häftiga strider hade utkämpats, innan detta mål kunde förverkligas, men resultatet var nu så mycket

mer lysande.

Venedigs palatser och Salomos tempelgårdar äro likasom hönsburar i sjönöd jämförda med det hem, de svenska ingeniörerna nu kunna kalla sitt eget, och i hvilket de funnit en bostad för sitt rika öfvermått af intelligens och lefnadsvishet.

Men så har icke heller några kostnader ansetts för stora för att uppföra detta monument öfver den svenska andliga odlingen i Amerika.

Det är nu två år sedan en kommitté tillsattes inom föreningen, bestående af Commissioner of Public Works Chas. Sengwall, Building Commissioner Klas Solson och Chief Star Exspector C. G. Flaxell, för att igångsätta och omhandhafva detta storartade byggnadsföretag, som i går fick en så enastående afslutning.

Ritningarna hafva uppgjorts af Direktörerna för de Högre Konsterna, herrar Ruben F. O'Gel, Carl Swesterlind och Bob Bröstergren i samråd med Sewer Pipe Commissioner Clarence Songman och Byggnads-Minister C. E. Scarson. Inredningen af matsalen och baren har skett under direkt öfverinseende af Presidenten för North-Eastern Electric F. W. Piggberg och Senator John E. Ricsson.

Det högtidliga mötet i går öppnades af föreningens ordförande Chief Draftsman S. G. Hörhanson med en enkel men känsligt framsagd välkomsthälsning på vers, hvarefter ordet öfverlämnades till Krigsminister

C. A. Kolin.

Hans Exellens befanns emellertid vara frånvarande, gifvetvis på grund af de oroliga goda tiderna, hvarför ordet fick lof att öfverlåtas till stadens borgmästare, herr K. G. Blindwall. Detta, yttrade borgmästaren, var det ljufligaste ögonblick han upplefvat, sedan den dag han såg sitt första bidrag till "Trasdockan" publicerat. Han utbrakte därefter ett lefve för svenskarna i Chicago, som åhördes stående.

Nästa talare var Civil Service Commissioner G. A. Kakerlind, som gaf en kort historik af föreningens födelse, fostran och uppväxt. Aldrig, sade han, skulle minnet af de första härliga åren svika honom, (enstaka

bravorop).

Den följande talaren, Kompositören af "The Notes," herr Carl Näve, instämde med de föregående talarna och uttalade sin glädje öfver att få vara närvarande vid detta tillfälle, hvilket han hade hoppats att icke få öfverlefva (handklappning).

Ordet togs nu af Chief Justice of the Supreme Court Hugo Mesterberg, som yttrade bl. a.: Mina herrar, spådomarna hafva besannats, "Tras-

docken" har vunnit seger (skratt och hvisslingar).

Ytterligare talare på programmet voro: Direktören för De Förenade Världarnas Stålverk, herr John Runner, föreningens högste, ständige (själfständige) klubbmästare, herr Fred Deaberg, punschprässfabrikören herr Erland Räfström och Senator Hj. Blundquist.

De omtalade alla huru de kommit hit till landet som oförståndiga ynglingar och nu njöto af stort anseende och beröm, tack vare den hjälp

de erhållit från Ingeniörsföreningen.

It is no dress affair Saturday, the 25th, at Svithiod, so ladies may, if they wish, appear in high neck. The gentlemen also.

På förslag af borgmästar Blindwall afsändes därefter hälsningstelegram till President Wilson.

Efter mötet intogs en animerad "sexa" under hvilken en liflig diskussom utspann sig mellan en del yngre medlemmar å ena sidan och de äldre å den andra, angående lämpligheten att införa en telefon i föreningens nya lokaler.

Diskussionen fortsätter, då denna tidning går i präss.

CETHA.

Rueben Fogel.

# LOST AND FOUND.

LOST.

Linwalls have promised to come to the Thanksgiving party. So has Engwalls.

#### TILL HVARJE ENSKILD MEDLEM AF SVENSKA INGENIÖRS-FÖRENINGEN I CHICAGO,

Att läsas och begrundas med allvar.

Nu då vi nalkas slutet af detta är, hafva vi ju en god anledning att gå till rätta med oss själfva för att finna ut i hvilken grad vi såsom medlemmar af en framåtsträfvande svensk ingeniörsförening bidragit under året 1916 till höjandet af dess sociala och intellektuella ställning.

Hvarje förening, hvarje stat och nation är en sammanslutning af individer med ändamål att befordra utveckling, framåtskridande och ett arbete för allas väl.

De gamla filosoferna delade individerna i staten i två klasser: de

närande och de tärande.

Gå vi närmast till oss själfva, skola vi finna, huru de flesta af oss tyvärr tillhöra den sistnämnda klassen, i det förhållande vi intaga gent emot vär förening, och gå vi längre, i det vi uppträda fordrande mot de få, som kunna räknas till den förstnämnda klassen, och hvilka äro de, som bära hela bördan; äfven den del vi borde bära.

Hvad har du gjort för att höja intresset inom föreningen? Har du öfver hufvud taget gjort någonting för att påpeka eller afhjälpa de brister, jag hört du säger existera? Har du någonsin tänkt på, att föreningen ställer fordringar på ALLA dess medlemmar och kanske på DIG i synnerhet? Kanske DIN intelligens är hvad föreningen saknar för att gå med sju-mila steg fram i vårt samhälle.

Liknöjdhet och oförstånd äro två oförlåtliga synder, som måste bekämpas. Och i den striden duga endast blanka vapen och klara hjärnor. Ty fienden är mångdubbelt starkare. — Men betydligt dummare.

MEDLEMSKOMMITTEEN.

#### "OPPORTUNITY."

Master of human destinies am I!
Fame, love and fortune on my footsteps wait.
Cities and fields I walk; I penetrate
Deserts and seas remote, and passing by
Hovel and mart and palace, soon or late
I knock unbidden once at every gate!
If sleeping, wake; if feasting, rise before
I turn away. It is the hour of fate.
And they who follow me reach every state
Mortals desire, and conquer every foe
Save death; but those who doubt or hesitate
Condemned to failure, penury and woe
Seek me in vain and uselessly implore,
I answer not, and I return no more!

JOHN J. INGALLS.



DANCE WITH ME the 25th of November at Svithiod. Tack! Ingen orsak.

Remember, the 25th of November!

Its' the day we meet For a Thanksgiving treat. (Announcement.)

## A DAY IN THE FLIVVER Or, 30 Years in Waterpipe.

When one drives around in a little Henry, one sees some strange sights, for instance Hughes elected the night before and the next morning we find it's Wilson, it's enough to give anyone a headache. And running for Congress is not what it's cracked up to be, especially when you have to run against an old horse that has been running for over 20 years. However, speaking about the high cost of living, even the horse manure with which the city protects it's fire hydrants in winter has gone up in price 25 per cent. Must be either on account of scarcity of feed or scarcity of horses. Westerberg is so brilliant, he may be able to suggest a remedy.

Having a flivver has its drawbacks however; when Lindwall moved up to Rogers Park, he told all of his friends who owned flivvers not to call on him as he did not wish to have the disgrace of seeing a flivver

outside of his door in such a swell neighborhood.

So next time I go up there, I will put mine across the street. Kind of unhandy, but the wishes of one's friends must be respected you know. However, Bolin said it was alright, but next time you see him ask him to tell you that story about: Further, further!

> Have you heard the flivver say: Further, further, It is only a little flivver, But it runs right along The little engine all aquiver, Like a bird of song it flie's through the air, It never needs repair. Call it a Tin Lizzie, But when you're very busy It will always bring you there And take you home from anywhere. Hurrah for Liz! She does the Biz

The above quotation from Shakespeare, I am sure will be appreciated by all flivver owners. C. O.

> There was an old man and he had a wooden leg; He had no money and he wouldn't beg, But he had a piece of pipe and a twelve-inch board, So he says, "By Heck, I'll have a Ford."

Well, he got some gas and a quart of oil, An' a piece of wire to make his coil; An' four big spools and an old tin can; Then he hammered them together and the darn thing ran.

Thanksgiving is only once a year-usually. This year it's twice—first time at Svithiod, the 25th of November.

#### ECONOMY.

Girl-I am going to marry a doctor, so that I can be well for nothing.

Boy-Why not marry a minister and then you could be

good for nothing?

#### THUMB-TACKS.

Failing to receive "Literis Artibus" for his artistic violin-playing, Chas. Bolin has decided to enter the literary field, and as he wants to begin at the bottom he is now addressing the envelopes for the "Notes" and expects, like the other "shining literary lights," at least a "Vasa Star," first class, in the near future. We wish him success.

Mr. Akerlind paid us a visit for few days, fact is, he came in to vote for his old friend Woodrow and also to make up a slate for our own coming elections.

What has become of our jovial friend G. E. Gustafson? Has he fallen by the wayside, he never shows up at our meetings any more.

It is rumored that Stjernberg is engaged to a charming north side lady. How about it, Axel?

#### TACKSÄGELSER.

Jag är tacksam till den som sändt till världen alla dessa demokrater, som gjort Hughes för detta blifvande president af Nordamerikas Förenta Stater. W. W.

Jag är tacksam, om jag får slippa job för nästa år. Är det ändå meningen, går jag ur föreningen.

P. G. Acell.

Jag är tacksam för titeln "Direktör", som S. I. F. varit snäll att ge mig, ty i Pullman är jag bara ingeniör, äfven om den har ett "Chief" breve' sig.

Parke.

Jag är tacksam för mitt trampklavér, det ger gäster nå't att göra, det smeker Charley's musikaliska öra — han spelar aldrig på fiolen mer.

Mrs. B—n.

Jag är taxam,—I can hardly say it,—for members' tax, if they ever pay it.

Akers.

Haf tack, hvarje aftonstund, nygifta Lindberg och Ekelund!

Jag är ej tacksam att vara tillbaka. Det är så skönt att lida och försaka.

Klas, presidentkandidat.

Jag är tacksam att vara tillbaka. Det ska' tusan lida och försaka. Iggberg, presidentkandidat.

Jag är tacksam för mina femti' år, tacksam för hvart slag som släggan slår. C. F. Anderson.

Jag är tacksam att intet händt, som kunnat störa friden, utan gladt och trefligt hela tiden, som jag varit president. Brunner.

#### EKONOMI.

Alla de äldre medlemmarna, som vi sällan se, komma till Svithiod om lördag. Glöm inte att taga hela familjen med — giftasvuxna ingeniörer hållas på lager! Thanksgiving för ett "ja" garanteras.



# The Swedish Engineers' Society of Chicago

Constitution *and* By-Laws Membership Book 1918

and

Year Book 1917

Founded October 10, 1908 Incorporated June 25, 1912



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# Swedish Engineers' Society of Chicago 1918

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# Constitution and By-Laws

of the

# Swedish Engineers' Society of Chicago

Adopted November 15, 1913

#### ARTICLE I.

# Name and Object of the Society

Section 1. The name of the Society shall be "The Swedish Engineers' Society of Chicago."

Sec. 2. The object of this Society shall be to promote knowledge, advancement and co-operation among the technical men of Swedish descent engaged in engineering and industrial operations in Chicago and vicinity.

#### ARTICLE II.

# Membership.

- Sec. 1. The membership shall be divided into five classes: Honorary, Life, Active, Corresponding and Associate.
- Sec. 2. **Qualifications.** To become a member it is required to be of Swedish descent and to meet the requirements as set forth below.
- Sec. 3. **Honorary Member** shall be a man of prominence in the sciences of industries or who has made himself deserving of the Society's highest regard.
- Sec. 4. **A Life Member** shall be an active or corresponding member of the Society who has paid to the treasury at one time the sum of fifty (50) Dollars. Such life member shall enjoy all privileges of an active member.
- Sec. 5. An Active Member shall be one possessing technical education, from some school or college, or shall be one who, through self-tuition and ability, has worked himself up to a position which requires engineering knowledge.

- Sec. 6. A Corresponding Member shall be residing at a distance of at least forty (40) miles from the city of Chicago. The requirements shall be the same as for an active member. The transfer of an active member to this group shall be made semi-annually.
- Sec. 7. An Associate Member shall be one who cannot qualify as active or corresponding, but who is interested in the Society's activities and who may, by his position in the community, be expected to aid the aims of the Society.

#### ARTICLE III.

# Admissions and Expulsions.

- Sec. 1. Application for membership shall be made on blank, the form of which is determined by the Board of Directors, and shall contain information on several points previously enumerated and a declaration that the applicant will abide with the rules and regulations of the Society. The applicant shall refer to at least two members who are acquainted with the applicant and can certify to his desirability as a member.
- Sec. 2. The application must be accompanied by an admission fee of two (2) dollars and shall be submitted to the Secretary who shall post the name of the candidate and the proposers on the bulletin board for at least one week. The board of directors shall then decide whether the applicant is acceptable or not, and shall determine to which class he may be referred. If the applicant is not accepted the admission fee shall be refunded.
- Sec. 3. An honorary member shall be proposed in writing, which shall give the reasons for the proposal and shall be signed by at least ten active members in good standing. He shall be elected only by unanimous vote of the entire Board of Directors, after the name of such candidate has been posted in the regular way. The voting to be done by letter bollot if necessary.
- Sec. 4. Membership of any person shall date from the date of his election. A rejected applicant may renew his application for membership at any time after the expiration of one year from the date of the ballot rejecting his previous application.
- Sec. 5. A member of the Society may resign his membership by a written communication to the Secretary, who shall present the same to the Board of Directors, who shall accept his resignation, if all his dues have been paid.

Sec. 6. Upon a written request of ten or more active members in good standing, given cause therefore, a member of the Society may be expelled by the Board of Directors, if there seems to be sufficient reason. The accused member shall first be advised of the charges against him and given an opportunity for defense. If expulsion is found justified, the member shall be notified, but unnecessary publicity should be avoided.

## ARTICLE IV.

#### Dues.

- Sec. 1. The yearly dues for an active member shall be six (6) dollars. The yearly dues for a corresponding member shall be two (2) dollars if residing in the United States or Canada, and shall be one dollar if residing in other countries. The yearly dues for an associate member residing within forty (40) miles of the city of Chicago shall be four (4) dollars. The yearly dues for an associate member residing forty (40) miles or more from the city of Chicago shall be two (2) dollars. All dues shall be paid in advance. An honorary member shall be exempt from payment of dues.
- Sec. 2. Any person whose dues are more than six months in arrears shall be notified by the Secretary or Treasurer. Should his dues become nine(9) months in arrears, he shall lose his right to vote and to receive the Society's publications, and should his dues become one year in arrears, he shall forfeit his connection with the Society. The Board of Directors, however, may for cause deemed sufficient, extend the time of payment and may relieve any member from paying part or all of his dues when circumstances or the interest of the Society are deemed to justify such action.

#### ARTICLE V.

#### Officers.

- Sec. 1. The officers of the Society shall be as follows:
- Sec. 2. A President who shall preside at the meetings and preform the duties pertaining to a presiding officer. He shall also be the chairman ex-officio of any committee he may appoint and whose meetings he may attend.
- Sec. 3. A Vice President, who shall, in the absence of the President, preform all duties required of that officer.

- Sec. 4. A Secretary, who shall attend to the official correspondence of the Society, receive applications for membership and keep records of the meetings and all official transactions.
- Sec. 5. A Treasurer, who shall, under direction and approval of the Board of Directors, handle all funds of the Society, collect dues and pay bills with check on a Chicago bank and keep books of all such transactions, enabling the Board of Directors at any time to determine the Society's financial standing. The Treasurer shall be bonded in a surety company at the expense of the Society.
- Sec. 6. The Board of Directors shall consist of the officers and five additional active members elected as stated in article VI.
- Sec. 7. The President, as chairman of the Board of Directors, shall call meetings of the Board whenever deemed desirable and shall together with the Board establish such rules and regulations for the Society's headquarters, when such exists, as they deem proper, and shall with the Board exercise a general supervision over the Society's affairs. At the request of three members of the Board of Directors an extra meeting shall be called.
- Sec. 8. Standing Committees. The incoming president shall at the annual meeting, appoint a Committee on Lectures, a House Committee and a Library Committee. The Committee on Lectures shall consist of three members, whose duties it shall be to arrange for the reading of papers, to lead discussions and otherwise contribute in making the meetings interesting. The House Committee shall consist of three members. This committee shall, under supervision of the Board of Directors, have charge of the Society's property, arrange for quarters and entertainments, etc., but must not incur greater expenses to the Society than given by written authority from the Board of Directors. The Library Committee shall consist of three members. This committee shall have supervision over the Society's library, receive books, magazines and pamphlets, shall list same and shall submit to the Board of Directors estimates of expense desirable to extend and maintain the library.
- Sec. 9. **Special Committees and the Appropriation of Money**. A proposition to appoint such a committee or to appropriate moneys shall be presented at a regular meeting of the Society, and, if sustained, the Board of Directors shall take the proposition under advisement and decide whether the object is justified and if the necessary expenses can be met by the Society. In such case, the

Board will select a committee and give it instructions as to the scope of its work and the amount of money available for the purpose. A two-third majority of the Board shall be required to decide, the votes to be cast by letter ballot if necessary.

#### ARTICLE VI.

#### Nomination and Election of Officers.

Sec. 1. The President, Vice President, Secretary, Treasurer and the Directors shall be elected from the active or life members, in the month of December annually. The officers shall hold office for one year and the directors for two years. Three directors shall be elected in the even years and two in odd years.

The term of each officer shall begin at the close of the annual meeting in January for the year for which he is elected, and shall continue for the period above named or until a successor is duly elected. Should any officer or member of the Board of Directors be unable to serve, such vacancy shall be filled by a life or active member elected by the Board of Directors.

- Sec. 2. There shall be a Nominating Committee composed of six (6) members of the Society, three of which shall be appointed by the Board of Directors and three of which shall be elected annually when the officers of the Society are electd. This committee shall elect its own chairman. It shall be the duty of this committee to meet in the early part of November of each year and nominate the candidates for officers and directors named in article V.
- Sec. 3. The three elective members of the nominating committee shall be nominated and elected at the regular December meeting of the Society.
- Sec. 4. The Secretary shall mail, on or before the last Thursday in November of each year, to each member entitled to vote a ballot containing the names of the nominated candidates for the several offices falling vacant. Under the names of the nominees for each office so printed there shall be provided a space for the use of the voter if he desires to substitute another name. The voter shall enclose said ballot in an envelope in a second envelope marked "Ballot," seal the same, and shall then write his name thereon for identification. The ballot thus prepared and enclosed shall then be mailed or delivered unopened to the Secretary of the Society. The Secretary or Treasurer shall then certify to the competency and signature of all voters. A ballot

without the autographic endorsement of the voter written on the outside of the envelope shall be marked "defective."

Sec. 5. All ballots shall be transmitted by the Secretary unopened to the presiding officer of the December meeting. The presiding officer shall then declare the election closed and shall appoint three tellers who shall first destroy all the defective ballots unopened. They shall then open and destroy the endorsed outer envelopes marked "Ballot," and then open the inner envelope and count the votes. The opening of both the outer and inner envelopes as well as the counting of the votes shall be done in open meeting after the election is closed. A ballot which contains more names than there are offices to be filled is thereby made "Defective," and shall be rejected by the tellers. tellers shall certify the results of the voting to the presiding officer, who shall then announce the candidates having the greatest number of votes for their respective offices and declare them elected for the ensuing year. A Tie vote shall be decided through revoting by the voters present.

Sec. 6. Questions of vital interest to the policies and existence of the Society, shall be submitted in writing at a regular meeting of the Society, and may be, by a majority vote of the members present at such meeting, ordered to be presented for a special ballot to be cast at the next regular December meeting. This ballot shall briefly state the pro and con of the question "Yes" or "No" should be voted and the ballot enclosed in the same envelope as that containing the official ballot. A two-third majority of the votes cast shall be necessary to carry the question.

#### ARTICLE VII.

# Meetings.

Sec. 1. The regular meeting of the Society shall be held each month at such hour and at such place as may be determined upon. Ten active members in good standing shall constitute a quorum for transaction of ordinary business, with the limitations as stated in Article V. Sec. 9, but questions of vital importance to the Society shall be submitted to letter ballot as described in Article VI, Sec. 6.

Extra meetings may be called by the President on his own initative or if petitioned by at least ten active members in good standing, who shall sign such petition and state the object of the

meeting. At such extra meeting only such business shall be transacted as stated in the notice to assemble.

Sec. 2. The annual meeting shall be the first regular meeting.

Sec. 3. Members have the privilege to invite friends to the meetings.

Sec. 4. "Robert's Rules of Order" to govern.

#### ARTICLE VIII.

## Permanent Funds.

The Commonwealth Edison first mortgage 5% gold bond No. 18095 of one thousand dollars par value and maturing in 1943 shall be held by the Treasurer of the Society, and only the interest thereof shall be used for current expenses. To this permanent fund shall be added the dues for life membership and such sums as the Board of Directors from time to time may decide to add. This permanent fund shall not be drawn upon unless decided in the following manner: The proposition shall be presented in writing at a regular meeting at least three months before the annual election, and may, by a majority vote of the members present at such meeting, be ordered to be presented for a special ballot to be cast at the next regular December meeting. This ballot shall briefly state the pro and con of the proposition. A two-third majority of the votes cast shall be necessary to carry the proposition.

## ARTICLE IX.

#### Amendments.

Proposed amendments to this constitution must be reduced to writing and signed by at least ten active members in good standing, and shall be submitted to the Board of Directors, who shall have the petition with the names of the petitioners and the proposed amendments printed with the call for a regular meeting of the Society. Should such a meeting by a two-thirds majority vote recommend the amendments as proposed or as amended by the meeting, then the question shall be submitted to a "Special Ballot." Such ballot to contain brief statement of the reasons for the change pro and con. A two-thirds majority of the votes cast shall be necessary to carry the amendment.

Amendments so adopted shall take effect immediately after the next annual meeting in January.

#### ARTICLE X.

# Dissolution of the Society.

- Sec. 1. Should the number of active members fall below twenty, a proposition may be entertained to disband, but this must be made in writing and addressed to the Board of Directors. An extra meeting shall then be called not earlier than six (6) days after the issuance of such notice, and no other business shall be transacted at such a meeting.
- Sec. 2. Should a meeting so held by a two-thirds majority decide on dissolution, then the question shall be submitted to all voting members by letter ballot and a two-thirds vote of all active and life members shall be necessary for the dissolution of the Society.
- Sec. 3. A history of the Society shall then be written, and, together with documents, books, correspondence and the gavel, or other relics and valuables the Society may possess, be deposited with the Swedish Historical Society of America, or, if this Society should not exist at the time of the dissolution or not be able to take care of the property turned over, then the Swedish Societies' Old People's Home Association of Cook County, Illinois, should be requested to take into safe-keeping all the belongings until another Swedish Engineers' Society may be formed in the City of Chicago.
- Sec. 4. Should any funds belonging to the Society be in existence at the time of dissolution, such funds and money shall be turned over to the party taking custody of the Society's property as a compensation for services to be rendered.

#### ARTICLE XII.

#### Order of Business.

The order of business shall be as follows:

- 1. Call to order by the President.
- 2. Reading of the minutes.
- 3. Report of Board of Directors.
- 4. Report of standing and special committees.
- 5. Unfinished business.
- 6. New business.
- 7. Reading of papers and discussion of same.
- 8. Election of officers (at the December meeting).
- 9. Adjournment.

# Membership List

- ABRAHAMSON, O. E. J., Active Member, 1913. Secretary 1917, one-third 1918. U. S. A.
- ACKANDER, ALBERT B., Charter Member, Corresponding Member, 1908. Res., Ocean Springs, Mo.
- ACKERLIND, D. M., Corresponding Member, 1916. Automobile Designer, Vilie Motor Vehicle Co., Moline. Res., 517 42nd St., Rock Island, Ill.
- ADAMSON, ERNST HJALMAR, Corresp. Member, 1916. U. S. Naval Gun Factory, Washington, D. C. Res., 418 7th St., N. E., Washington, D. C.
- AKERS, AXEL, Active Member, 1913.

  Treasurer, 1915-1916.

  Mechanical Enginner, in charge of Municipal Shop.
  Chicago, Ill.
  Res., 7357 Vernon Ave., Chicago, Ill.
- AHLBERG, G. A. F., Corresponding Member, 1910. With Ahlberg Kerosene Carborator Company, 2539 Oliver Building, Pittsburgh, Pa.
- AKERLIND, G. A., Charter Member, Life Member, 1908. Secretary, 1908-09-10-11-12-13-15. Inspecting Engineer, Bridge Dept., City Hall, Chicago. Res., 536 Rush St., Chicago, Ill.
- AKERLIND, J. AD., Corresponding Member, 1909. Constructing Engineer, Res., Hedemora, Sweden.
- ALINDER, HENRY, Corresponding Member, 1910. With Allis-Chalmers Company. Res., 598 34th St., Milwaukee, Wis.
- ALZEN, CARL A., Charter Member, Active Member, 1908 Fire Protection Engineer, "Royal" of Liverpool. Res., 3240 Kenmore Ave., Chicago, Ill.

- ANDERSON, CARL A., Active Member, 1915.
  President, Reliance Elevator Company, Chicago.
  Res., 1503 Lake Ave., Wilmette, Ill.
- ANDERSON, C. B., Active Member, 1913. With Western Electric Co., Hawthorne, Ill. Res., 6147 Champlain Ave., Chicago, Ill.
- ANDERSON, CARL F., Active Member, 1913. Manufacturer. Res., 121 South Austin Ave., Chicago, Ill.
- ANDERSON, JOHN C. A., Active Member, 1914.

  Treasurer, Reliance Elevator Company,
  212 West Austin Ave., Chicago, Ill.
- ANDERSON, JOHN F., Corresponding Member, 1912. U. S. Vice Consul, Copenhagen, Denmark. Res., Båstad, Sweden.
- ANDERSON, JOHN M., Active Member, 1916. Estimator, Bulley K. Andrews, General Contractors. Res., 7950 Princeton Ave., Chicago, Ill.
- ANDERSON, H. A., Active Member, 1908. With Central Iron Works, Chicago. Res., 342 W. Chicago Ave., Chicago, Ill.
- ANDERSON, WALTER B., Active Member, 1917.

  Designing Engineer, Roberts & Schaefer Co.,
  McCormick Building, Chicago.
  Res., 4867 Kenmore Ave., Chicago, Ill.
- ASTROM, CARL P., Corresponding Member, 1915. Chief Engineer, M. H. Treadwell Co., New York. Res., 14 Chestnut St., East Orange, N. J.
- AXEL, SWEN, Corresponding Member, 1912. Res., Kungsholmsgatan 30, Stockholm, Sweden.
- AXELL, C. G., Active Member, 1909.

  Vice President, 1911. Secretary, 1914.

  Engineer of Elec. Design, Commonwealth Edison Co.
  Res., 3732 N. Racine Ave., Chicago, Ill.
- BALCHER, MARTEN, Charter Mem., Active Member, 1908. With Blomfeldt & Rapp Co., Chicago. Res., 1422 Belle Plaine Ave., Chicago, Ill.

- BERG, ERNST J., Sc. D., Life Member, 1910.
  President, 1911.
  Professor of Electrical Engineering,
  Union College, Schenectady, N. Y.
- BERG, GUSTAV, Corresponding Member, 1909. General Manager, "Lux" Company, Stockholm, Sweden.
- BERGEN, THEODORE A., Corresponding Member, 1913. Chief Electrical Engineer, A.-B. Industribyrån, Västra Trädgårdsgatan 7, Stockholm, Sweden.
- BERGENDORF, G., Corresponding Member, 1912. Superintendent, Rock Island Plow Co., Rock Island. Res., 850 22nd St., Rock Island, Ill.
- BERGLAND, ERIC, MAJOR, Corresponding Member, 1909.

  Major Corps of Engineers, U. S. A., Retired.

  P. O. Box 30, Baltimore, Md.
- BERGMAN, L. H., Active Member, 1918.

  Vice President and Treasurer, American Industrial Engineering Company,

  452-53 Monadnock Building, Chicago, Ill.

  Res., 4134 Kenmore Ave., Chicago, Ill.
- BERGQUIST, CARL, Corresponding Member, 1909. With F. W. Tunnell & Co., 15 North Fifth St., Philadelphia, Pa. Res., 1848 North Park Ave., Philadelphia, Pa.
- BERGQUIST, J. G., Charter Member, Life Member, 1908. Consulting Engineer. Res., Glen Head, Long Island, N. Y.
- BILLNER, K. P., Corresponding Member, 1916. Billesholms Grufva, Sweden.
- BIRCH, CHARLES H., Active Member, 1912. With H. W. Caldwell & Son, Chicago. Res., 3253 Southport Ave., Chicago, Ill.
- BIRKLAND, EMIL E., Active Member, 1909. With Crane Company, Chicago. Res., 1417 N. California Ave., Chicago, Ill.

- BJURSTROM, K. GUSTAF A., Charter Member, Active Member, 1908. Treasurer, 1911. Asst. Chief Locomotive Draftsman, C. & N.-W. Ry. Co. Res., 1625 Ainslie St., Chicago, Ill.
- BJÖRKSTEDT, WILLIAM, Corresponding Member, 1910. Manistee, Michigan.
- BJÖRNBOM, T., Corresponding Member, 1912. With Luth & Rosen's Elek. A.-B., Stockholm. Res., Högbergsgatan 54, Stockholm, Sweden.
- BJÖRNCRANTZ, FRANZ, Associate Member, 1916. Superintendent of Printing. Res., 1445 Farraguet Ave., Chicago, Ill.
- BLOMFELDT, P. AXEL, Active Member, 1912. With Blomfeldt & Rapp Co., Chicago. Res., 6523 Greenview Ave., Chicago, Ill.
- BOLIN, C. A., Corresponding Member, 1908.

  Treasurer, 1913-1914. Vice President, 1916.

  Western Electric Co., Inc., Engineering Department, 463 West Street, New York City.

  Res., 933 East 181st St., New York City.
- BOMB, KARL, Corresponding Member, 1910. With H. Koppers Company, Pittsburgh, Pa. Res., 6109 Alder St., Pittsburgh, Pa.
- BORG, FRED G., Active Member, 1910. Engineer of Shops, Chicago Surface Lines. Res., 6943 Eberhardt Ave., Chicago, Ill.
- BORGMAN, OSCAR J., Active Member, 1916. Architectural Draftsman, Sargent & Lundy, Engin'rs. Res., 4017 N. Paulina St., Chicago, Ill.
- BROBERG, H. A., Active Member, 1910. Address Unknown.
- BRORSON, CARL, Corresponding Member, 1917.
  With Twin City Forge & Foundry Co.,
  Stillwater, Minnesota.
- BRUNNER, JOHN, Charter Member, Active Member, 1908.
  President, 1916.
  Asst. Inspecting Engineer, Illinois Steel Co., Chicago.
  Res., 627 Dartmouth Place, Evanston, Ill.

- BRÖMS, C. O. J., Corresponding Member, 1913. Ingeniör, Sandvikens Jernverks A.-B., Sandviken, Sweden.
- CARLSON, ANDROV, Active Member, 1910. Manufacturer. Res., 6030 Sheridan Road, Chicago, Ill.
- CARLSON, CHARLES A., Active Member, 1916. Forging and Structural Steel. Res., 3300 Palmer St., Chicago, Ill.
- CARSON, C. E., Active Member, 1909. Vice President, 1914. General Contractor. Res., 928 Argyle Ave., Chicago, Ill.
- CEDERBLOM, RAGNAR, Active Member, 1912. With Chas. G. Atkins, Consulting Engineers. Res., 2707 East 78th St., Chicago, Ill.
- CEDERBORG, G. V., Corresponding Member, 1910. A.-B. Svenska Sockerfabriken, Arlöf, Sweden.
- CEDEROTH, ALEF, Active Member, 1913. U. S. A.
- COLGREN, A. F., Charter Member, Active Member, 1908.
  Manufacturer.
  Res., 233 W. 61st St., Chicago, Ill.
- CRONQUIST, G. W:SON, Corresponding Member, 1913. Asst. Director, A.-B. Raméns Patenter, Helsingborg, Sweden.
- DAHLBERG, GUSTAVE, Active Member, 1915. Res., 5635 Waveland Ave., Chicago, Ill.
- DAHLIN, ERNST, Corresponding Member, 1910. Chemist, Tidafors Sulfitfabrik, Sandhem. Res., Tidafors, Sandhem, Sweden.
- DEDERING, HELMER, Active Member, 1912. With Mark Mfg. Co., Indiana Harbor, Ind. Res., 6426 Vernon Ave., Chicago, Ill.
- DEHLIN, MARTIN, Active Member, 1910. With Western Steel Car & Foundry Co., Hegewisch. Res., 13328 Burley Ave., Hegewisch, Ill.

- DEVIN, KLAS LUDVIG, Corresponding 1910. With American Bridge Co., Pittsbugh, Pa.
- DILLNER, OLOF I., Corresponding Member, 1915.
  Chief Draftsman, Interstate Contr. & Supply Co.,
  St. Louis, Mo.
  Res., 4570 Oakland Ave., St. Louis, Mo.
- DUNER, JOHN C., Active Member, 1910. Manufacturer, 101 S. Clinton St., Chicago. Res., Wheaton, Illinois.
- EDLUND, K. EDW., Corresponding Member, 1912. With Oxelösunds Jernverk, Sweden. Res., Oxelösund, Sweden.
- EHNBORN, CLEMENS, Active Member, 1912.
  Manufacturer.
  Res., 4450 Montana St., Chicago, Ill.
- EICHHORN, M. J., Charter Member, Active Member, 1908.
  Mechanical Engineer.
  With Sargent & Lundy, Engineers.
  Res., 502 W. 60th Place, Chicago, Ill.
- EKBLOM, F. W., Active Member, 1915.

  Mechanical Draftsman,

  North-Western Railway Company, Chicago.
  Res., 1510 N. Spaulding Ave., Chicago, Ill.
- EKLUND, JOEL, Active Member, 1917. Supervisory Engineer, Joseph Schneible. Res., 5105 N. Ashland Ave., Chicago, Ill.
- EKLUND, SVEN, Active Member, 1913. With Graham Supply Co., Chicago. Res., 5030 Warwick Ave., Chicago, Ill.
- ENGBLOM, PER NIKANOR, Corresponding Member, 1917. Chemical Engineer, Philippine Vegetable Oil Co., Manila, P. I.
- ENGWALL, CHARLES F., Charter Member, Active Member, 1908. Contractor. Res., 3143 Wilson Ave., Chicago, Ill.

- ERICSON, E. J., Charter Member, Active Member, 1908. Chemical Engineer, C. H. Lord Corporation, Chicago. Res., 5045 Cullom Ave., Chicago, Ill.
- ERICSON, JOHN, R. V. O., Active Member, 1910. President, 1912 and 1914. City Engineer, City Hall, Chicago. Res., 848 Lakeside Place, Chicago, Ill.
- ERICSSON, HENRY, Charter Member, Life Member, 1908.
  President, 1913.
  General Contractor, City Hall Square Bldg., Chicago.
  Res., 534 Surf St., Chicago, Ill.
- ERICSSON, JOHN E., Charter Member, Active Member, '08.
  Vice President, 1915. President, 1918.
  General Contractor,
  Lanquist & Illsley Co., Chicago, Ill.
  Res., 4530 Beacon St., Chicago, Ill.
- ERIKSON, CARL E., Active Member, 1910. Res., 4844 North Irving Ave., Chicago, Ill.
- ERIKSON, CLIFFORD E. J., Corresponding Member, 1910. Res., 514 Lincoln Way, East Mishawaka, Ind.
- ERICKSON, EMIL, Active Member, 1912.
  President Erickson Machinery Co., Chicago.
  Res., 7809 South Shore Drive, Chicago, Ill.
- ESBJÖRNSON, åKE, Corresponding Member, 1910. Patent A.-B. Jungners Kali-Cment, Norrköping. Sweden.
- FERNGREN, AUGUST, Active Member, 1910.
  Manager, A. F. Cement Construction Co., Chicago.
  Res., 3052 Davlin Court, Chicago, III.
- FLODENBERG, A. T., Charter Member, Corresponding Member, 1908. With A., T. & St. F. R. R., Topeka, Kans. Res., 404 German Ave., Topeka, Kans.
- FOCK, OSCAR, Corresponding Member, 1913. With Tammerfors Linne Jern Mnfr. Co., Tammerfors, Finland.

- FOGEL, J. P., Active Member, 1913.

  Mechanical Engineer,

  Western Electric Company, Hawthorne, Ill.
  Res., 4210 N. Sawyer Ave., Chicago, Ill.
- FOGEL, R. W., Active Member, 1909. Architect, with E. C. & R. M. Shankland, Chicago. Res., 1839 Warner Ave., Chicago, Ill.
- FREDRICKSON, GOTTFRIED, Corresp'g Member, 1910. With Aktiebolaget Hamilton & Hansell, Vestra Kajen 12, Helsingfors, Finland.
- FRIBERG, EMIL, Active Member, 1912. Superintendent, Lanquist & Illsley Co., Chicago. Res., 4619 Dover St., Chicago, Ill.
- FRÖLEN, FREDRIK, Corresponding Member, 1914. With Nickols & Todsen Company, Stockholm. Res., Odensgatan 17, Stockholm, Sweden.
- GABRIELSON, ERIK V., Corresponding Member, 1910. Engineer, Allmänna Sv. Elektriska A.-B., Vesterås. Res., Floragatan 17, Vesterås, Sweden.
- GORANSON, S. G., Active Member, 1912. Treasurer, 1918. With Wahl Adding Machine Co., Chicago. Res., 643 Melrose Ave., Chicago, Ill.
- GULLBORG, JOHN S., Active Member, 1909.
  Treasurer, 1917.
  President, Alemite Metals Co., Chicago.
  Res., 4631 Beacon St., Chicago, Ill.
- GUSTAFSON, E. A., Active Member, 1915. With Stewart-Warner Speedometer Corp., Chicago. Res., 1836 S. Sawyer Ave., Chicago, Ill.
- GUSTAFSON, G. EDWARD, Active Member, 1912. Civil Engineer, E. C. & R. M. Shankland, Chicago. Res., 1213 Eddy St., Chicago, Ill.
- HAEGSTEDT, A. L., Active Member, 1914. General Contractor and Builder. Res., 727 Bittersweet Place, Chicago, Ill.

- HALL, ERIC E., Active Member, 1909.County Architect,11 South La Salle St., Chicago.Res., 1214 Cornelia Ave., Chicago, Ill.
- HAMRÉN, ERIK O., Corresponding Member, 1916. With Allis Chalmers Mfg. Co., West Allis, Wis. Res., 536 72nd Ave., West Allis, Wis.
- HANSON, VICTOR, Active Member, 1912. General Foreman, Crane Company, Chicago. Res., 540 Harvey Ave., Oak Park, Ill.
- HASSELQUIST, HUGO S., Active Member, 1913. Superintendent, Wahl Adding Machine Co., Chicago. Res., 4109 Greenview Ave., Chicago, Ill.
- HAWKINS, KARL, Active Member, 1916. Superintendent and Designer, Stierlin Machine & Die Works, Chicago. Res., 1632 Altgeld St., Chicago, Ill..
- HEDELIN, C. W., Charter Member, Active Member, 1908.With Illinois Steel Company, North Works.Res., 4822 N. Ashland Ave., Chicago, Ill.
- HEDMAN, C. M., Active Member, 1910.

  President, Hedman Manufacturing Company, Chicago.
  Res., 720 Irving Park Blvd., Kellshore Hotel, Chicago.
- HELLMAN, FREDRICK, Corresponding Member, 1914. Res., 9-11 Engelbrektsgatan, Stockholm, Sweden.
- HENREKSON, JOHN W., Corresponding Member, 1913. General Manager, Ahlen & Holm, Insjön, Sweden.
- HILLBERG, A. G., Corresponding Member, 1912. Chief Enginer and Manager, Engineering & Contracting Dept., Pacific Commercial Company, Manila, P. I.
- HODELL, ERNST, Corresponding Member, 1916.With Bergslagernas Järnvägar.Address, Åmål, Sweden.
- HODGSON, JOHN F., Active Member, 1915. Sargent & Lundy, Engineers, Chicago. Res., 1301 N. Dearborn St., Chicago, Ill.

- HOGLUND, GUST. E., Corresponding Member, 1910.With Fort Wayne Electric Company.Res., 909 Parkview Ave., Fort Wayne, Ind.
- HOLM, ERIC E., Corresponding Member, 1912.
  Mining Engineer,
  Loussavaara-Kirunavaara Aktiebolag.
  Res., Malmberget, Sweden.
- HOLMEN, A. R., R. V. O., Corresponding Member, 1909. Chief Draftsman, Pennsylvania Lines, Columbus, O. Res., 73 Cleveland Ave., Columbus, Ohio.
- HOLMER, F. N., Active Member, 1916.

  Designer

  With Freyn & Co., 122 South Michigan Ave., Chicago.
  Res., 721 N. Clark St., Chicago, Ill.
- HOLMES, SVEN, Charter Member, Corresp. Member, 1908.With Douglas Company, Cedar Rapids, Iowa.Res., 859 A Avenue, Cedar Rapids, Iowa.
- HULTAN, K. A., Corresponding Member, 1916. Address, 1022 National Realty Bldg., Tacoma, Wash.
- HVITFELDT, ROBERT, Associate Member, 1909.

  Designer and Engraver, 508 S. Dearborn St., Chicago.

  Res., 1329 Carmen Ave., Chicago, Ill.
- HYTTENBERG, EUGEN, Corresponding Member, 1914. Lieutenant. Address, Norrviken, Sweden.
- IGGBERG, F. W., Corresponding Member, 1909.
  Vice President, 1913. President, 1917.
  With American Electric Fan Company,
  Logansport, Indiana.
- INGEMANSON, THURE W., Active Member, 1918.

  Asst. Engineer, Lewis Institute Structural Materials
  Research Laboratory of the Portland Cement Ass'n.
  Res., 5840 Chicago Ave., Chicago, Ill.
- JERNBERG, CARL, Active Member, 1910. Superintendent, Standard Forgings Company, Indiana Harbor, Ind. Res., 6550 Harvard Ave., Chicago, Ill.

- JERNSTROM, JOSEPH AXEL, Corresp. Member, 1917.
  Chemist, with American Smelting and Refining Co.,
  Omaha, Neb.
  Res., 2313 Douglas Ave., Omaha, Neb.
- JOHANSON, THURE A., Active Member, 1909. Superintendent, Cable Piano Company. Res., St. Charles, Ill.
- JOHNSON, ARTHUR A. V., Corresponding Member, 1913. Res., 247 Sheridan St., Zanesville, Ohio.
- JOHNSON, BROR, Corresponding Member, 1915. With Chile Exploration Company, Chuquicamata, Chile.
- JONSSON, SIXTEN, Active Member, 1914. Estimator and Engineer, Lanquist & Illsley Company, Chicago. Res., 2330 115th St., Chicago, Ill.
- KARLSON, G. L., Active Member, 1917. With Link Belt Company, Chicago. Res., 5556 Wayne Ave., Chicago, Ill.
- KARLSTEEN, AXEL, Active Member, 1912. General Contractor. Res., 3019 Edgewood Ave., Chicago, Ill.
- KJELLSTEDT, L. HARALD, Corresponding Member, 1910.
   Principal, International Correspondence School,
   Scranton, Pa.
   Res., 1026 Woodlawn Ave., Scranton, Pa.
- KROPP, C. A., Active Member, 1914.President, Kropp Forge Company, Chicago.Res., 2512 W. 21st St., Chicago, Ill.
- KULLBERGER, ERIC, Active Member, 1909.With South Side Auto Exchange,6047 South Halsted St., Chicago, Ill.
- KUYLENSTJERNA, ADOLF, Corresponding Member, 1909.
  Mechanical and Electrical Engineer,
  With The American Railways Company,
  913 Witherspoon Building, Philadelphia, Pa.

- LAGERGREN, G. P., Active Member, 1917. With Leonard Construction Company, Chicago. Res., 5419 University Ave., Chicago, Ill.
- LAGERHOLM, EVAR, Active Member, 1914. Sales Engineer, Illinois Tool Works, Chicago. Res., 1417 Farragut St., Chicago, Ill.
- LANQUIST, ANDREW, Active Member, 1910. Builder, Lanquist & Illsley Company, Chicago. Res., 4630 Beacon St., Chicago, Ill.
- LARSON, AXEL F., Active Member, 1909. Superintendent, The Marquette Piano Co., Chicago. Res., 7925 S. Peoria St., Chicago, Ill.
- LARSON, P. L., Active Member, 1912.

  President and Treasurer, Central Iron Works, Chicago
  Res., 3628 W. Fulton St., Chicago, Ill.
- LAUREN, J. W., Active Member, 1918.

  President, American Industrial Engineering Co., 452-53 Monadnock Building, Chicago, Ill.

  Res., 4136 Kenmore Ave., Chicago, Ill.
- LEFFLER, HAKON M., Corresponding Member, 1912. Res., Ljusne, Sweden.
- LETH, ERIC GUNNAR, Corresponding Member, 1917. Chemist, with Eli Lilly & Co., Pharmaceutical Chemists, Indianapolis, Ind. Res., 820 N. East St., Indianapolis, Ind.
- LEVEDAHL, AXEL, Corresponding Member, 1913.
  Consulting Engineer,
  Aurora Automatic Machine Company, Aurora, Ill.
  Res., 33 Hickory St., Aurora, Ill.
- LEVIEN, RAGNAR J. O., Active Member, 1914.

  Designer, with Roberts & Schaefer Co.

  Res., 243 Mason Ave., Chicago, Ill.
- LEVIN, A. M., Corresponding Member.
  Professor, Kungl. Tekniska Högskolan,
  Stockholm, Sweden.

- LEVIN, ASTOLF P. E., Corresponding Member, 1909.
  Advertising Manager,
  The Sharples Separator Company, West Chester, Pa.
  Res., 229 East Washington St., West Chester, Pa.
- LEVIN, N. D., Charter Member, Corresp. Member, 1908. Chief Engineer, The Jeffrey Manufacturing Company, Columbus, O. Res., 1814 N. High St., Columbus, Ohio.
- LIDSEEN, GUSTAVE, Active Member, 1912.

  Manufacturer.

  Res., 434 South Scoville Ave., Oak Park, Ill.
- LINDBERG, EMIL, Active Member, 1914.With Swedish Iron & Steel Corporation,New York and Chicago.Res., 3852 N. Clark St., Chicago, Ill.
- LINDBERG, TORVALD, Corresponding Member, 1910. Address, Box 445, Marshfield, Oregon.
- LINDEBLAD, EINAR, Active Member, 1916. With Swedish Iron & Steel Corporation, 654 W. Lake St., Chicago, III.
- LINDGREN, W. L., Active Member, 1915.
  President, Security Tool Works, Chicago.
  Res., 5950 Dakin St., Chicago, Ill.
- LINDQUIST, O. F., Corresponding Member, 1912. General Contractor. Address, Route No. 5, Box 44, Springfield, Mo.
- LINDWALL, K. G., Active Member, 1912. With State Bank of Chicago. Res., 7031 Ridge Ave., Chicago, Ill.
- LJUNGBECK, TAGE G., Corresponding Member, 1916. Mechanical Engineer. Res., Kungsgatan 30, Malmö, Sweden.
- LUND, A. G., Charter Member Active Member, 1908. Architect, 810 W. 63rd St., Chicago, Ill. Res., Palos Park, Illinois.
- LUNDBERG, SVEN, LIEUT., Corresponding Member, 1914.
  Asst. Superintendent, Nobel Bros., Baku, Russie.
  Res., Barnhusgatan 13, Stockholm, Sweden.

- LUNDGREN, A. A:SON, LIEUT., Corresp. Member, 1912. Address, Elfkarleö, Sweden.
- LUNDGREN, ADOLPH, Active Member, 1912. General Contractor. Res., 6828 Normal Blvd., Chicago, Ill.
- LUNDQUIST, HJALMAR, Associate Member, 1908. With Universal Tool & Die Works. Res., 1421 Summerdale Ave., Chicago, Ill.
- LUNDQUIST, H. R., Active Member, 1915.

  Designer, Western Electric Company, Hawthorne.
  Res., 911 School St., Chicago, Ill.
- LUNDQUIST, JOEL, Active Member, 1917. Civil Engineering. 3012 Prairie Ave., Chicago, Ill.
- LÖFWEBERG, JOHAN, Corresponding Member, 1917. Sweden.
- MAGNUS, CARL E., Active Member, 1917. Tool Designer, 1508 Larrabee, Y. M. C. A., Chicago, Ill.
- MAGNUSON, T. J., Active Member, 1914. Superintendent, H. E. Pridmore Molding Machine Co. Res., 1655 Clifton Park Ave., Chicago, Ill.
- MALLING, MALTE, Active Member, 1912. With International Harvester Co., McCormick Works, Chicago, Ill. Res., 2603 North Hamlin Ave., Chicago, Ill.
- MALMSTEN, J. O., Active Member, 1916.

  Mechanical Designer,

  Western Electric Company, Hawthorne, Ill.

  Res., 4043 Nelson St., Chicago, Ill.
- MALMSTROM, ALEX. G., Corresponding Member, 1909.
  Chief Draftsman,
  National Cash Register Company, Dayton, Ohio.
  Res., 143 Indiana Ave., Dayton, Ohio.
- MATTSON, ERICK, Active Member, 1917.

  Tool Designer, with Miehle Printing Press Mfg. Co.
  Res., 3526 N. Crawford Ave., Chicago, Ill.

- MAYER, HJALMAR, Active Member, 1909.
  Secretary, 1918.
  With R. E. Schmidt, Garden & Martin, Architects.
  Res., 5344 Winthrop Ave., Chicago, Ill.
- MELLQUIST, AXEL, Corresponding Member, 1912. With Stephens Adamson Manufacturing Co., Aurora. Res., 131 Galena Blvd., Aurora, Ill.
- MILDE, IVAR, Corresponding Member, 1910. Kungl. Vattenfallsstyrelsen, Klara 23, Karlstad, Sweden.
- MODINE, A. B., Corresponding Member, 1910. Modine Manufacturing Company, Racine, Wis.
- MONSON, AXEL A., Active Member, 1915.

  Manager, Universal Stamping & Manufacturing Co.
  Res., 4706 N. St. Louis Ave., Chicago, Ill.
- MONSEN, GUNNAR S., Corresponding Member, 1910. General Contractor. Res., Örebro, Sweden.
- MOOHL, J. G., Corresponding Member, 1912. Res., 18403 Euclid Ave., Cleveland, Ohio.
- MOSSBERG, FRANK, Corresponding Member, 1914.

  President, Frank Mossberg Co., Attleboro, Mass.

  Res., Attleboro, Mass.
- NANNFELDT, GEORGE, Active Member, 1910. With Link Belt Company, Chicago. Res., 7926 S. May St., Chicago, Ill.
- NANNFELDT, JAKOB, Corresponding Member, 1913. With Allis-Chalmers Mfg. Co., West Allis, Wis. Res., 555 72nd Ave., West Allis, Wis.
- NAUCKHOFF, B., Corresponding Member, 1913. With Zenite Metal Company, Indianapolis, Ind.
- NELSON, NELS, Active Member, 1918.

  Superintendent, Universal Portland Cement Co.,
  Buffington, Ind.
  Res., 6601 Minerva Ave., Chicago, Ill.
- NELSON, OSCAR, Active Member, 1914. U. S. A.

- NICHOLSON, VICTOR, Active Member, 1913.
  Vice President, 1918.
  Engineering Chemist,
  Bureau of Streets, City of Chicago.
  Res., 7621 Lowe Ave., Chicago, Ill.
- NORBERG, HARALD, Corresponding Member, 1914. Res., 6829 Bayliss Ave., Cleveland, Ohio.
- NORDER, G., Corresponding Member, 1909. Res., Holmgatan 13, Falun, Sweden.
- NORDQUIST, R. E. J., Active Member, 1917.
  Asst. Chief Draftsman,
  American Can Company, Maywood, Ill.
  Res., 202 North Central Ave., Chicago, Ill.
- NORELL, MARTIN, Charter Member, Active Member, 1908. Chief Draftsman, Chicago Steel Car Company, Harvey, Ill. Res., 8121 Loomis St., Chicago, Ill.
- NORLIN, FRED, Charter Member, Active Member, 1908. Civil Engineer and Surveyor, 30 North La Salle St., Chicago. Res., 2744 Mildred Ave., Chicago, Ill.
- NORLING, REINHOLD A., Corresponding Member, 1913. With Aurora Automatic Machine Co., Aurora, Ill. Res., 180 Wilder St., Aurora, Ill.
- NYBERG, HENRY, Charter Member, Life Member, 1908.
  President, 1908-1909.
  Automobile Manufacturer.
  Res., Kitchener, Ontario, Canada.
- NYDEN, JOHN A., Active Member, 1913. Architect, 64 W. Randolph St., Chicago. Res., 5511 Wayne Ave., Chicago, Ill.
- NYQUIST, CARL JOHAN, Active Member, 1917.
  Manager, Torchweld Equipment Company.
  Res., 1349 Winemac Ave., Chicago, Ill.
- NYSTROM, C. HJ., Active Member, 1918.
  Chemical Engineer,
  Department Chief, Fibre Making Processes,
  440 South Dearnborn St., Chicago, Ill.

- OBERG, STEN V., Corresponding Member, 1913. With Owosso Sugar Company, Owosso, Mich.
- OFVERBERG, C. G. N., Corresponding Member, 1918. Res., 111 Austin St., Cambridge, Mass.
- OLSON, CARL G., Active Member, 1917. Chief Engineer, Illinois Tool Works. Res., 619 Wrightwood Ave., Chicago, Ill.
- OLSON, JOHN O., Corresponding Member, 1910. Chief Engineer, With Hubbard Ice Company, Cedar Rapids, Iowa. Res., 1206 Fourth Ave. E., Cedar Rapids, Iowa.
- OLSON, KARL E., Active Member, 1913.
  Chief Chemist,
  Metals & Thermit Corporation, East Chicago, Ind.
  Res., 1105 Beacon St., East Chicago, Ind.
- OLSON, KLAS O., Active Member, 1909.

  Building Superintendent,

  Leonard Construction Company, Chicago.

  Res., 1474 Foster Ave., Chicago, Ill.
- ONGMAN, CLARENCE S., Active Member, 1912.

  Vice President, 1917.

  Foreman, Water Pipe Extension, City Hall, Chicago.
  Res., 1432 Balmoral Ave., Chicago, Ill.
- OSTERGREN, ROBERT C., Active Member, 1909. Vice President, 1912. Architect, Hall & Ostergren, Address, 11 South La Salle St., Chicago, Ill.
- OSTLIND, BENJAMIN, Corresponding Member, 1914.
  Consulting Engineer and Architect.
  Res., Irving Block 206, Marchfield, Oregon.
- öSTLIN, OLOF, Corresponding Member, 1909.

  Mechanical Engineer,
  Bolinders Mekaniska Verkstäder, Stockholm, Sweden.
- PALLIN, B. O., Active Member, 1917.
  Sales Engineer,
  C. J. Tagliabue Manufacturing Company, Chicago.
  Res., 1436 Victoria St., Chicago, Ill.

- PALMQUIST, THURE, Active Member, 1912. With J. H. Heuser, Monadnock Block, Chicago, Res., 2701 Lincoln Ave., Chicago, Ill.
- PARKE, PETER, Active Member, 1910. Chief Engineer, Pullman Company, Chicago. Res., 5466 Everett Ave., Chicago, Ill.
- PEARSON, HAROLD, Active Member, 1912. Superintendent, Torchweld Equipment Company. Res., 7244 Dobson Ave., Chicago, Ill.
- PETERSON, C. H., Corresponding Member, 1914. Southwestern Representative, Baldwin Locomotive Works, 1610 Wright Building, St. Louis, Mo.
- PETERSON, C. S., Active Member, 1912.

  Director, Peterson Linotyping Company, Chicago.
  Res., 757 Buena Ave., Chicago, Ill.
- PETTERSON, HUGO, Corresponding Member, 1912.
  Construction Engineer,
  Mt. Vernon Bridge Company, Ohio.
  Res., 506 E. Gambier St., Mt. Vernon, Ohio.
- PETTERSON, HJALMAR, Corresponding Member, 1909. With Finland State Railway, Helsingfors, Finland. Res., Borgågatan 21, Helsingfors, Finland.
- PIHL, KARL, Active Member, 1914.
  General Manager,
  B. & K. Electrical Manufacturing Co., Chicago.
  Res., 3708 Pinegrove Ave., Chicago, Ill.
- RANDERS, F., Active Member, 1912. With Sargent & Lundy, Engineers. Res., 846 Roscoe St., Chicago, Ill.
- RANG, C. E., Associate Member, 1913. U. S. A.
- RAPP, AXEL G. J., Active Member, 1917. Superintendent of Construction, Link-Belt Company, Chicago. Res., 1255 Rosedale Ave., Chicago, Ill.

RAPP, OSCAR, Active Member, 1916.

Manufacturer,

Blomfeldt & Rapp Company, Chicago.
Res., 1443 Berwyn Ave., Chicago, Ill.

RENNERFELT, IVAR, Corresponding Member, 1909. Chief Engineer, A.-B. Elektriska Ugnar, Stockholm, Sweden. Res., Vanadisvägen 24, Stockholm, Sweden.

RISSLER, ALBIN, Charter Member, Life Member, 1908.
President, 1915. Vice President, 1908-09-10.
Mechanical Engineer,
Chicago Railway Equipment Company, Chicago.
Res., 7225 Emerald Ave., Chicago, Ill.

ROOS, ERIC, Active Member, 1909. Res., 219 Wisconsin St., Chicago, Ill.

ROOS, GUNNAR, Corresponding Member, 1910.

With Ludvigsbergs Verkstads-Aktiebolag, Stockholm.

Res., Heimdalsgatan 1, 3 tr., Stockholm, Sweden.

RYDSTEDT, S. D., Active Member, 1918.

Mechanical Engineer,
Stewart-Warner Speedometer Corporation, Chicago.
Res., 3004 Blaine Place, Chicago, 111.

RYDSTROM, UNO, Corresponding Member, 1913. Wit A.-B. Diesel Motorer, Stockholm, Sweden. Res., Hornsgatan 26-1, Stockholm, Sweden.

SAFSTROM, ERLAND, Active Member, 1914.
Mechanical Designer,
The B. F. Cumimngs Mfg. Co., Chicago.
Res., 5120 Glenwood Ave., Chicago, Ill.

SAHLIN, JOHN, Corresponding Member, 1912.

Manufacturer,

Grand Rapids, Michigan.

SANDEGREN, ANDREW, Active Member, 1910. Architect, 2064 Conway Building, Chicago, Ill.

SANDELL, H. K., Active Member, 1910. With Mills Novelty Company, Chicago. Res., 1646 Farragut Ave., Chicago, Ill. SÄVE, CARL, Corresponding Member, Secretary, 1916. Architect. Res., Jerome, Idaho.

SEABERG, FRED, Charter Member, Active Member, 1908.
Treasurer, 1908-1909.
Chief Draftsman,
Standard Forgings Company, Indiana Harbor, Ind.
Res., 5247 Glenwood Ave., Chicago, Ill.

SEAHOLM, M. A., Active Member, 1917.

Mechanical Draftsman and Machine Designer,
American Can Company, Maywood, Ill.

Res., 903 North Avenue, Maywood, Ill.

SCHOTT, JOHN H., Active Member. 1912. Architect. Res., 744 Gorden Terrace, Chicago, Ill.

SJOBRING, N. P., Active Member, 1916.

Mechanical Engineer,

Acme Supply Company, Chicago.

Res., 1008 N. Laurel Ave., Chicago, Ill.

SJOLANDER, AXEL K., Active Member, 1914. Engineer, Link Belt Company, Chicago. Res., 1438 Summerdale Ave., Chicago, Ill.

SJÖSTRÖM, FRANK, Active Member, 1913. Draftsman. Res., 3239 Leland Ave., Chicago, Ill.

SKJÖLD, GÖSTA, Corresponding Member, 1909. Kungl Vattenfallsstyrelsen, Stockholm, Sweden. Res., Forshaga, Sweden.

SKOGMARK, JOHN, Corresponding Member, 1912. Res., 35 Nassau St., New York City.

SODERBECK, ADOLJH R., Active Member, 1917. Superintendent, Pollak Steel Company. Res., 7823 Saginaw Ave., Chicago, Ill.

SODERSTAM, J. T., Active Member, 1910. Civil Engineer, The Sanitary District of Chicago. Res., 1211 Newport Ave., Chicago, Ill.

- SONANDER, JOSEF, Corresponding Member, 1912. With International Harvester Corporation. P. O. Box 1131, Moscow, Russia.
- SPAAK, CHAS. E., Corresponding Member, 1910. Res., Alingsås, Sweden.
- SPARR, VICTOR W., Active Member, 1914. Electrical Designer, With Sargent & Lundy, Engineers. Res., 1345 North Shore Ave., Chicago, Ill.
- STERZEL, S. E., Corresponding Member, 1912. Res., Kaponiergatan 5, Gothenburg, Sweden.
- STJERNSTEDT, J. W., Corresponding Member, 1912. Res., 402 Rialto Bldg., San Francisco, Cal.
- STRANDBERG, ERIK P., Active Member, 1912. General Contractor. Res., 5027 Drexel Blvd., Chicago, Ill.
- STRID, SVEN J., Charter Member, Active Member, 1908. With Central Locomotive & Car Works. Res., 1643 Buena Vista Ave., Chicago Heights, Ill.
- STRUKEL, ARVID, Corresponding Member, 1912. Res., Andrégatan 7, Helsingfors, Finland.
- SUNNERGREN, S. P., Corresponding Member, 1912. Chief Draftsman, Denver & Rio Grande Rairoad Co., Denver, Colo. Res., 3447 Pecos St., Denver, Colo.
- SUNDSTROM, HANS, Corresponding Member, 1909. With Patent A.-B. Jungners Kali-Cement, Norrköping, Sweden.
- SWENSON, CARL G., Corresponding Member, 1915.
   Vice President, Oakes Pressed Steel Company, Indianapolis, Ind.
   Res., 1623 Fletcher Ave., Indianapolis, Ind.
- SWENSON, GODFREY, Corresponding Member, 1916.
  President and Treasurer,
  Swenson Construction Company.
  Res., 78 Lydia St., Kansas City, Mo.

- SYLVAN, CHR., Corresponding Member, 1910. Editor of Industritidningen "Norden," Stockholm. Res., Tunnelgatan 19A, Stockholm, Sweden.
- TEVANDER, SWAN N., Active Member, 1917. Equipment Department, American Can Company, 405 N. Fourth Ave., Maywood, Ill.
- TJÄDER, JOHN, Corresponding Member, 1909. Res., Birkagatan 18, Stockholm, Sweden.
- TORNBERG, KARL, Corresponding Member, 1910. Chemist and Mining Engineer, Oliver Iron Mining Company, Norway, Michigan.
- TURNQUIST, EDW., Corresponding Member, 1917.
  Ordnance Base Depot,
  Stone & Webster, 613-G Street, Washington, D. C.
- TÖRJESON, T. A., Corresponding Member, 1915. Ingeniör, Kungl. Järnverksstyrelsen, Stockholm. Res., Saltsjöbaden, Sweden.
- VELANDER, V. R., Corresponding Member, 1910. With Willis E. Holloway Company, Cleveland, Ohio. Res., 8410 Denison Ave., Cleveland, Ohio.
- WÆSSMAN, L. G., Active Member, 1913. With R. W. Hunt & Co., Engineers. Res., 3239 W. Congress St., Chicago, Ill.
- WÆSSMAN, JOHN R., Active Member, 1918.
  Chemist,
  With Metals & Thermit Corp., East Chicago, Ind.
  Res., 4509 Tod Ave., East Chicago, Ind.
- WAHLBERG, NILS ERIK, Active Member, 1917. Chief Engineer, With Nash Motor Company, Kenosha, Wis. Res., Kenosha, Wis.
- WANDELL, IVAR, Corresponding Member, 1914. Res., 611 California Ave., South Bend, Ind.
- WAXBOM, CHAS. J. E., Corresponding Member, 1910.
  Consulting Engineer.
  Res., 151 E. Park St., Westerville, Ohio.

- WEDBERG, AXEL G. W., Corresponding Member, 1916. Estimator. Res., 1319 Park Ave., Kansas City, Mo.
- WEDBERG, SVEN H., Corresponding Member, 1913. Res., Döbelsgatan 5-III, Stockholm, Sweden.
- WERN, GUST. PERS., R. V. O., Active Member, 1912.

  President, Wern Mach. and Eng. Company,
  30 Church St., New York, N. Y.
- WERNER, F. J., Active Member, 1914.

  Asst. Master Mechanic,
  Inland Steel Company, Indiana Harbor, Ind.

  3433 Michigan Ave., Indiana Harbor, Ind.
- WESTBERG, CARL A., Active Member, 1910. Vice President, East Chicago Company, Indiana Harbor, Ind. Res., 301 W. 67th St., Chicago, Ill.
- WESTERBERG, HUGO EM., Active Member, 1910. Res., 3528 Broadway, Chicago, Ill.
- WESTERLIND, CARL, Active Member, 1909.
  Treasurer, 1910.
  Architect.
  Res., 1201 Ainsley St., Chicago, Ill.
- WEYDELL, F. O., Charter Member, Active Member, 1908.
  Manufacturer, 12 South Clinton St.
  Res., 7100 Ridge Blvd., Chicago, Ill.
- WENNERBERG, AUGUST, Active Member, 1915. Consulting Engineer. Res., 3042 Keating Ave., Chicago, Ill.
- WEYDELL, JARL MAGNUS, Corresponding Member, 1917. Electrical Engineer. Res., 820 N. East St., Indianapolis, Ind.
- WICKLAND, ALGOT A., Active Member, 1910.

  Treasurer, 1912.

  With Cambell, Wyant & Cannon Foundry Company, Muskegon, Ill.

  Res., 4539 North Whipple St., Chicago, Ill.

- WIDELL, M. E., Active Member, 1914. Chief Draftsman, With American Can Company, Maywood, Ill. Res., 343 Maple Ave., Oak Park, Ill.
- WILANDER, P., Corresponding Member, 1909. With Whitaker & Glessner, Portsmouth, Ohio.
- WINGREN, ARTHUR, Corresponding Member, 1912. Address, Finnboda Slip, Stockholm, Sweden.
- WITTING, ALBIN G., Active Member, 1916.
  Asst. Chief Engineer,
  Indiana Steel Company, Gary, Ind.
  Res., 610 W. 8th Ave., Gary, Ind.
- WOHLBERG, J. A., Charter Member, Active Member, 1908. With Illinois Steel Company, South Chicago, Ill. Res., 6346 S. Wood St., Chicago, Ill.



### MEMBERS

of

# The Swedish Engineers' Society of Chicago May 1, 1918.

Life Members	6
Active Members	3
Corresponding Members—	
In U. S. A., Canada and South America 6	
In Europe 4'	7
Associate Members	1
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## Annual Report

of the

## Swedish Engineers' Society of Chicago 1917

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The unprecedented industrial activities in the United States during the year 1917, which have resulted in numerous changes of positions and locality among our members, coupled with the international political situation of today, has in a not small degree contributed to a slight decrease in the Society's activities for that year. It is to hope, however, that with the re-establishment of industry along standardized lines the engineers in this country of Swedish descent, and especially those in Chicago and surrounding towns and industrial centers, will be afforded better opportunities to partake in promoting the high-minded aims of this Society, as well as idealistic social questions of paramount importance to our nationality.

Thus, with the prospect of strenuous efforts among the members to make this Society a still more influential and to the members at large more useful engineering organization, it is to be expected that this year and coming years will reveal the innermost, slumbering, slow to awaken and arouse enthusiasm, typical for the Swedes, for combined efforts for the welfare of their fellow professionals.

At a Board of Directors' meeting in January, a committee to be known as the Special House Committee, was appointed. The task laid before this committee was to, if possible, secure new and more suitable quarters for the Society. At the March meeting of the Board, Mr. K. G. Lindwall, acting secretary for the committee, was present, and gave a lengthy report of the efforts of the committee to obtain new, more advantageously appointed, and for the need of the Society more suitable club rooms, the handicaps the committee had had to confront, etc.

The committee, finding itself unable to satisfactorily solve the question at this time, therefore recommended that the Society renew its lease with the City Hall Square Company for a short term, pending further developments in connection with the matter of new quarters. As this question was as pressing as ever, it was recommended that the committee should be continued for the balance of the year.

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At this same meeting of the Board it was recommended, that on account of the many disadvantages of the Society's "closed door policy," desk room should be offered to a fellow member, who would look after the Society's office, attend to the telephone, etc.

It was further found important to have a certain specified time when someone of the officers of the Society could be present. The Secretary undertook to establish office-hours when he himself or some fellow member appointed by him, would be found in the office.

Office-hours have thus during the past year been maintained by the Secretary as regularly as his time and circumstances have permitted, on Tuesday and Thursday 6 to 7 P. M., and on Saturdays 1 to 3 P. M., to the presumably ultimate satisfaction of the members, visiting engineers and others persons interested in the Society.

Owing to the alarming advances in the cost of printing in the recent years, it was decided on early in the year, to issue a less elaborate Membership Book than what has been the custom in the past years. Through this action the Society's expenses for printed matter during the year was cut by several hundred dollars

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In April an appeal was sent to the members of the Swedish Engineers' Society of Chicago to show their willingness to contribute to a very commendable cause. The United States Congress in 1916 appropriated 35,000 dollars for a monument to the inventor of the "Monitor," John Ericsson. The government also named a commission of men of Swedish descent to take charge of the details in erecting said monument, the first monument the U. S. A. government ever has erected to the memory of an inventor-engineer. At this commission's second meeting, held in Chicago, the 10th of March, 1917, (the first one was held in New York, November 25, 1916), it was decided to increase the government's appropriation with an

additional sum of 25,000 dollars, to be raised through public subscription, in order to enable the commission to erect a monument, which would impart the dignity fitting the memory of John Ericsson. It was naturally up to us of the same profession and hailing from the same native country, and citizens of the same adopted country, as the banner bearer among Swedish engineers, to take the lead and show the Swedish population in Chicago and America at large, that we as fellow professionals of John Ericsson, first of all appreciated the recognizance given the Swedish engineers through John Ericsson's memorable services to this country as well as his many other great accomplishments in the engineering field. It was in just as critical a time as the present that this SWEDE emerged from relative obscurity and through his genius placed his and the Swedish name forever on the pages of the American and world history. The members freely subscribed towards the fund which will make possible the raising of a monument, worthy of John Ericsson's memory, in our adopted country's beautiful capital. Washington.

The Society has during the year also become a member of the Swedish Societies' Old People's Home Association of Evanston, Illinois, through the adoption of the following resolutions:

WHEREAS, the Swedish Societies' Old People's Home Association of Evanston, Illinois, is a non-sectarian institution open to Swedish old people regardless of their religious affiliations, and

WHEREAS, said association has been for many years fulfilling a most noble and worthy duty to our Swedish old people, and

WHEREAS, they are most deserving of the support of the various Swedish societies, therefore be it

RESOLVED, that we, the Swedish Engineers' Society of Chicago, do hereby express our sincerest appreciation of the efforts of said association and as a token of such appreciation do hereby tender the sum of fifty (50) dollars to compose the Swedish Engineers' Society's of Chicago membership fee in the Swedish Societies' Old People's Home Association of Evanston, Illinois, for the years 1918 and 1919, to beforwarded to this noble institution, and with it our sincerest wishes for its continued prosperity.

A schedule of the changes in the membership from January 1, 1917, to this date, shows that the total gain has been 14, which brings the number of members in the Society today to 287.

	Active embers	Corresp. in U.S.A.	Corresp. Abroad	Asociate	Total
New Members	19	3			22
Suspended for non-					
payment of dues	1				1
Resigned	3	1			4
Dead	2	1			3
Changes of Status to	4	2		2	0
· · · · · from	7	6	1		0
	*	* *			14

The officers during 1917 were: President, F. W. Iggberg; Vice-President, Clarence S. Ongman; Secretary, O. E. J. Abrahamson; Treasurer, John S. Gullborg.

As officers for 1918 have been elected: John E. Ericsson, President; Victor Nicholson, Vice-President; O. E. J. Abrahamson, Secretary; S. G. Goranson, Treasurer.

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The meetings of the Society during the year have been seven: The annual meeting, three meetings of an educational nature, the annual banquet and ball, one "stag" party, and the December meeting, when the election of officers for 1918 took place.

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It has not been attempted in this report to detail the activities of the Society during the past year; for more specified data the members are advised to avail themselves of all the information desired from the various committee's comprehensive reports.

January 26, 1918.

O. E. J. ABRAHAMSON, Secretary.

## TREASURER'S REPORT FOR 1917.

To the Swedish Engineers' Society of Chicago:

Gentlemen—The following shows the receipts and disbursements of money, and financial standing of the Society for the year ending December 31, 1917:

# RECEIPTS Balance for year 1916......\$1,605,25

Money received during the year 1917	
Total receipts	\$2,540.12
DISBURSEMENTS	
Expenses for the year 1917	\$1,013.18
Assets on hand Dec. 31, 1917—	
Commonwealth Edison Company, Bond No. 18095	
Permanent fund in savings bank	
Interest for same for 18 months, entered in pass bo	ok
January, 1918, \$7.21.	
Cash in bank December 31, 1917	333.55
Total	\$2,540.12
The following is an itemized account of receipts a	
itures during the year 1917:	
Itemized Receipts During 1917.	
Cash received from Applications	\$ 34.00
Cash received from Dues	649.77
Cash received from House Committee	176.10
Cash received from Adv'ts in "Trasdockan" 1916	10.00
Cash received from Adv'ts in "Trasdockan" 1917	15.00
Cash received from Bond Interest	50,00
	\$934.87
Itemized Disbursements During 1917.	

## Office rent in City Hall Square Building.....

\$495.00

Office Tent in City Han Square Dunuing	px20.00
Printing and engraving	280.63
Light, Commonwealth Edison Co	5.90
Infant Welfare Society	1.50
Historical Society	4.50

Writing Treasurer's Report for 1916	1.00
Secretary's Expenses	43.71
Exchange on Checks	1.15
Membership Committee	5.50
Addressograph Company	
Hotel Sherman	191.25
Signs	2.50
Lighting Fixture Repairs	3.60
Postage for Treasurer	6.37
Subscriptions to Periodicals	23.00
Bond of Treasurer	5.00
Telephone	4.29
<del></del> \$1	,013.18
Assets	
Commonwealth Edison Company Bond\$1	,035.00
Commonwealth Edison Company Bond\$1 Permanent Fund, Savings Account State Bank of Chicago	1,035.00
Permanent Fund, Savings Account State Bank of Chicago Savings Bank Interest for 18 months entered in pass	
Permanent Fund, Savings Account State Bank of Chicago	
Permanent Fund, Savings Account State Bank of Chicago Savings Bank Interest for 18 months entered in pass book January, 1918, \$7.21.	158.39 333.55
Permanent Fund, Savings Account State Bank of Chicago Savings Bank Interest for 18 months entered in pass book January, 1918, \$7.21. Cash in Bank	333.55 
Permanent Fund, Savings Account State Bank of Chicago Savings Bank Interest for 18 months entered in pass book January, 1918, \$7.21. Cash in Bank	333.55 
Permanent Fund, Savings Account State Bank of Chicago Savings Bank Interest for 18 months entered in pass book January, 1918, \$7.21. Cash in Bank  Total  \$1 Balance Dec. 31, 1916.	333.55 
Permanent Fund, Savings Account State Bank of Chicago Savings Bank Interest for 18 months entered in pass book January, 1918, \$7.21. Cash in Bank	333.55 
Permanent Fund, Savings Account State Bank of Chicago Savings Bank Interest for 18 months entered in pass book January, 1918, \$7.21. Cash in Bank  Total	333.55 

Respectfully Submitted,

JOHN S. GULLBORG,

Treasurer.

## REPORT FROM THE AUDITING COMMITTEE.

Chicago, Ill., January 19, 1918.

To the Swedish Engineers' Society of Chicago.

Gentlemen—The undersigned having been appointed a committee to audit the Treasurer's books for 1917, find them to be correct, and the Society's finances as follows:

### RECEIPTS

Cash balance on hand Jan. 1, 1917	\$1,605.25
Money received during 1917.	
	\$2,540.12
EXPENDITURES	
Total expenditures during 1917	\$1,013.18
Balance on hand Dec. 1, 1917	
	\$2,540.12
The balance on hand consists of:	
One Commonwealth Edison Bond No. 18095	\$1,035.00
Permanent Fund in Savings Bank	158.39
Cash on Bank Dec. 31, 1917	
	\$1,526.94

We take pleasure in recommending that the Society accept with a vote of thanks, the faithful services rendered by its Treasurer, John S. Gullborg.

Respectfully Submitted,

AXEL AKERS, WALTER B. ANDERSON.

## REPORT OF THE LECTURE COMMITTEE.

The 1917 Lecture Committee endeavored as far as possible to obtain the services of fellow members for lectures during the year, and succeeded to some extent in this respect.

At the February meeting Mr. Carl Bergquist delivered a lecture on "Corn Products," and as his talk proceeded submitted samples of various corn products for the members' examination.

"Pressed Steel" was the subject for a lecture delivered at the April meeting by another fellow member, Mr. Birger Nauckhoff of Indianapolis, Indiana. The lecture was illustrated by slides.

The lecturer at the May meeting was Mr. G. C. Wilsnack, Chief Chemist, Universal Portland Cement Company, Buffington, Indiana, who spoke on the subject, "The Manufacture of Universal Portland Cement. The lecture was illustrated with a large number of slides, and also supplemented by samples of rawmaterials in the various states of production as well as the finished product.

LECTURE COMMITTEE.

By J. Abrahamson, Sec'y.

## REPORT OF LIBRARY COMMITTEE FOR THE YEAR 1917.

The Library Committee has during the past year, carried on its work in the usual manner.

The Library Committee has subscribed and by donation had following technical magazines and publications on various subjects available: "American Machinist," "Engineering News-Record," "Power," "The Foundry," "Electrical World," "Industrial Management," "The World's Work," "The National Geographical Magazine," Bulletins from the department of the Interior," "Bulletins from the University of Illinois," "The Traveler's Standard," "The Swedish American Trades Journal."

The following Swedish papers and publications: The comic paper "Strix," "Teknisk Tidskrift," "Industritidningen Norden," "Svensk Export," "Jernkontorets Annaler," "Sveriges Industri-Förbund," "Tegel," "Verkstäderna," and for the first part of last year the Swedish newspaper "Svenska Dagbladet."

Owing to the fact that no money was appropriated, the committee could not resubscribe to the paper "Svenska Dagbladet."

Among the Swedish American papers may be mentioned: "Svenska Amerikanaren," "Svenska Tribunen-Nyheter," "Svenska Amerikanska Posten," and "California Veckoblad."

Owing to the limited space in the Society's office it was found necessary to dispose of all back numbers of magazines and publications.

Would recommend that the Society subscribe to one Swedish newspaper, preferably "Svenska Dagbladet."

The Library Committee wishes to extend its thanks to the Society's officers and members for the kind co-operation during the past year.

Respectfully submitted this 26th day of January, 1918.

THE LIBRARY COMMITTEE, Erland Säfström.

### REPORTS OF THE HOUSE COMMITTEE.

The meetings arranged during the year were seven.

The first one was held at the Swedish Club, February 24, and was well attended by the members..

The Annual Dinner and Dance, which was held in the Crystal

Room of the Hotel Sherman, March 31, was a very successful affair, although the attendance was small.

About 50 members were present at the regular meeting April 28, held at the Svithiod Singing Club.

The regular May meeting was held at the Swedish Club, May 26, and was despite the season one of the best attended meetings of the year.

The November meeting, held at the Svithiod Singing Club November 24, proved, however, to be the meeting per preference with 72 members present. A number of entertainers saw to it that the members went home with the conviction that this had been the most pleasant gathering of the Society for years.

December 29 the Society held its annual election at the Svithiod Singing Club. The meeting was attended by 47 members and guests.

The Annual meeting was held at the Swedish Club, January 26, 1918.

THE HOUSE COMMITTEE,
By J. Abrahamson, Sec'y.

## REPORT OF PUBLICATION COMMITTEE FOR 1917.

To the Swedish Engineers' Society of Chicago.

During the past year the Publication Committee has continued to issue our little paper, known as S. E. S. Notes. The issue being put forth as follows: February, March, April May, November, December and January.

Owing to the fact that no outing or meetings were held in June, July, August, September or October, and as the Publication Committee had nothing to announce nor anything of special interest to report, the S. E. S. Notes did not appear in the above metioned months. We feel, however, that the Notes have been well received during the past year, and hope the Committee for 1918 will be more successful than we have been in making the Notes still more interesting in the future than they have ever been in the past.

Respectfully Submitted,

CLARENCE S. ONGMAN, Chairman Publication Committee.

Chicago, Ill., January 26, 1918.

## THE ANNUAL MEETING.

Of The Swedish Engineers' Society of Chicago, January 26, 1918. at the Swedish Club, 1258 North La Salle Street.

The meeting was called to order by the Vice President, Mr. Ongman, 8:50 P. M.

Minutes from previous meetings were read and approved..

The Secretary announced that N. Ofverberg had been elected active member of the Society at a Board of Directors meeting immediately preceding the general meeting.

The following reports were read and ordered printed in the 1917 Year Book:

The Secretary's, Treasurer's, Auditor's, Library and Publication Committee's.

Mr. M. Hedman, Chairman of the House Committee, made a verbal account of said Committees' work during the year, and promised to furnish the Secretary with a written report later on.

The Chairman of the Lecture Committee, Mr. C. Bergquist, for the past half year located in Philadelphia, Pa.,had been requested by the Secretary to submit a report of the Lecture Committee's accomplishments in the past year, but such a report had not been received up to the time of the Meeting. The Secretary was therefore instructed to write this Committee if it should not be forthcoming.

Mr. Ongman now with a few remarks turned over the gavel to the new President, Mr. John E. Ericsson, and wished him and his fellow officers success in the coming year. Mr. Ericsson in a short, extemporaneous speech thanked the members for the honor which they had conferred upon him, and felt assured that if the members came to the fore and assisted the administration in its work, 1918 would, without doubt, be as successful as the present unprecedented circumstances permit.

As no new business was before the house the meeting now adjourned for the banquet.

In the course of the evening the members were priviliged to listen to the very well presented and exceptionally good oratorical abilities of several of the members, as well as to compliments from countrymen in San Francisco through one of our members in said city, Mr. Stjernstedt. In reply to the greetings the following telegraph was dispatched:

The Swedish Club,

%Portla Louvre Cafe, Powell Street, San Francisco, California.

Having had the pleasure of enjoying the company of one of your members, "Bill," at the annual banquet of the Swedish Engineers' Society of Chicago, we take pleasure of sending most hearty greetings.

John E. Ericsson, Pres.

The Society's former President, Mr. John Brunner, has sent Mr. John E. Ericsson, present incumbent of the presidental chair a letter read by the later during the "Nachspiel," in which he Mr. Brunner, extended his best wishes to the Society and its new officers and also ventured his belief that with superlative efforts on the part of the officers and the members at large, the basic principles and fundamental grounds on which the Society was founded, would be reborn and re-established, and the work during the ensuing year crowned with success.

The President also read a telegram from fellow members in Indianapolis, Indiana, who wishes the Society all the success for the coming year.

J. ABRAHAMSON, Secretary, 1917.





## In Memoriam



FRANK A. PETERSON, surveyor, well known to the older members of the Society, died December 15, 1917. Mr. Peterson was born in Elmeboda parish, province of Småland, Sweden, April 18, 1856. His youth Mr. Peterson spent on his fathers farm up to the age of seventeen years when he entered Wäxiö Högre Allmänna Läroverk, in the fall 1872.

Having graduated from this institution 1880, young Peterson went to Upsala where he took a preliminary judicial degree 1884. In the years that followed Mr. Peterson was unable because of economical circumstances to attend to his studies regularly, and he finally found himself forced to abandon forever his contemplated judical career.

His education, however, and especially his thorough knowledge of mathematics did not come amiss, when he arrived in United States and came to Chicago 1892. Here Mr. Peterson, thanks to his proficiency in the above mentioned science, had no difficulties in securing a good connection with Fred. Norlin's Civil Engineering and Surveying Office. He then became associated with Geo. W. Jackson, the famous tunnel builder and multi-millionaire, with whom he remained for seven years. From this time on until his death Mr. Peterson was in the surveying business for himself.

Honest, punctual, tolerant and forbearing it is no wonder that Mr. Peterson made many business as well as social friends.

Mr. Peterson's wife, who was Dorothy Nielson, of Paxton, Ill., to whom he was married 1905, survives him.

# SVENSKA INGENIÖRS-FÖRENINGEN I FÖRENTA STATERNA The American Society of Swedish Engineers 271 Hicks Street, Brooklyn, New York

Albin Gustafson, ordförande; Axel S. Hedman, vice ordförande; John Hj. Olson, sekreterare; Ernst öhnell, skattmästare. Föreningen grundlagd den 11 Febr. 1888. För närvarande 316 medlemmar.

## SVENSKA INGENIÖRS-FÖRENINGEN I CHICAGO The Swedish Engineers' Society of Chicago

619-620 City Hall Square Building, 139 North Clark Street, Chicago, Ill.

John E. Ericsson, ordförande; Victor Nicholson, vice ordförande; J. Abrahamson, sekreterare; Hjalmar Mayer, tillsatt som sekrterare att fylla vakans; S. G. Göranson, skattmästare. Föreningen grundlagd den 10 Okt. 1908. För närvarande 272 medlemmar.

#### THE SWEDISH HISTORICAL SOCIETY OF AMERICA Founded 1905

- AIMS—1. To collect a central libraray of books, papers and manuscripts written by, or relating to Swedish-Americans; also works on the history, culture and literature of Sweden.
  - 2. To issue publications relating to the Swedish people in America.
  - 3. To encourage and promote the study of Swedish literature and history in American universities and colleges.
- DONATIONS—Gifts to the library should be addressed: Orrington Ave. and Lincoln St., Evanston, Ill.
- MEMBERSHIP—Any person who desires to aid in furthering the work of the Society may become a member by remitting the annual fee of \$2.00 to the Recording Secretary, Mr. C. G. Axell, 3732 N. Racine Ave., or to the Corresponding Secretary, Mr. Wm. F. Carlson, 332 S. Michigan Ave.

Edw. C. Westman, President; N. A. Nelson, Vice President; C. G. Axell, Recording Secretary; Wm. F. Carlson, Corresponding Secretary; Ernest E. Freeman, Treasurer; C. G. Wallenius, Librarian.

The library is located in the Swedish Theological Seminary, 2408 Orrington Ave., Evanston, Ill., where it may be consulted at any time on application to Professor C. G. Wallenius

### JOHN CRERAR LIBRARY, CHICAGO, ILL.

Scientific reference library. All technical literature in the English and foreign languages. Open free to the public from 9 o'clock in the morning until 10 o'clock in the evening. Located on the 6th floor of Marshall Field Building, entrance on Wabash Ave.

#### PUBLIC LIBRARY, CHICAGO, ILL,

Michigan Avenue, Washington and Randolph Streets. Reference Room for United States Patent Office, entrance from Randolph Street.

### SVENSKA KLUBBEN 1258 North La Salle Street, Chicago

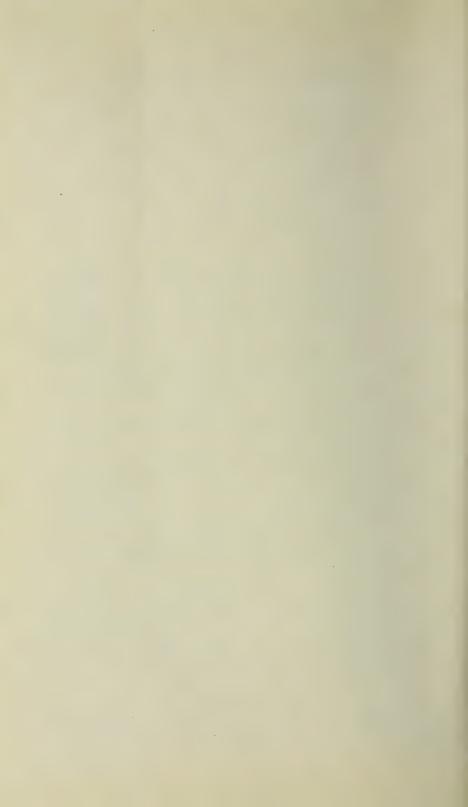
Charles S. Peterson President; C. E. Carson, Vice President. Knute A. Warner, Secretary; George F. Anderson, Treasurer; Dr. Emil Anderson. Librarian.

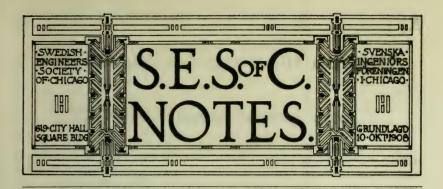
Board of Directors—Francis Winship, Rudolph Engberg, Ivar Holmquist, Eric A. Warner. All visiting engineers cordially invited.

#### SVITHIOD SINGING CLUB 624 Wrightwood Avenue, Chicago

John P. Friedlund, President; Hermann Olson, Vice President; Alb. Kellberg, Recording Secretary; Hjalmar Olson, Financial Secretary; J. Olof Nelson, Treasurer.

Board of Directors—John E. Ericsson, Arvid Washberg, Peter C. Jacobson, P. Theodore Lundquist, C. G. Axell.





CHICAGO, ILL., APRIL, 1917.

# REGULAR MEETING

will be held at THE SVITHIOD SINGING CLUB, Saturday, April 28th, at 8:00 P. M. Board of Directors meet 7:30 P. M.

Our esteemed fellow member, Birger Nauckhoff with the Zenite Metal Company, Indianapolis, Ind., will deliver a very interesting lecture on "Pressed Steel." The lecture will be illustrated with a number of slides.

Be sure to come, and do not forget to bring your friends. After the meeting "Supé a la Sweden" will be served.

# At the May Meeting

we will have the pleasure to listen to a very constructive lecture on the "Manufacture of Portland Cement," given by Mr. G. C. Wilsnack, with Universal Portland Cement Company, Buffington, Ind.

# **NEW MEMBERS**

Walter B. Anderson, 5105 N. Ashland Ave. Active.
Carl Brorson, Stillwater, Minn. Corresponding.
Joel Eklund, 5105 N. Ashland Ave. Active.
J. A. Jernström, 508 Englewood Ave. Active.
Carl G. Olson, 619 Wrightwood Ave. Active.
Axel G. J. Rapp, 1255 Rosedale Ave. Active.
Adolph R. Soderbeck, 7823 Saginaw Ave. Active.
Swan N. Tevander, 405 N. 4th Ave., Maywood, Ill. Active.
J. W. Weydell, 820 N. East Ave., Indianapolis, Ind. Corresponding.

# RESIGNED

Oscar R. Hendrickson, Chicago, Ill. John L. Malm, Denver, Colo.

# Upprop till Svenska Ingeniörer

# JOHN ERICSSON-MONUMENTET

Som bekant anslog Förenta Staternas Kongress förra året \$35,000 till ett monument, att resas i Washington, till minne av vår store landsman, John Ericsson. Detta är första gången, som Förenta Staternas regering anslagit medel till ett monument till en ingeniörs ära, och det är med stolthet, som vi, av svensk härkomst, välkomna detta erkännande av en landsman snille, ett erkännande av den amerikanska regeringen, att John Ericsson, en man av svensk börd, som så väl tjänat sitt nya hemland, skulle först av alla dess framstående ingeniörer och vetenskapsmän hedras med ett monument i landets huvudstad.

En kommission av män av svensk härkomst utnämndes även av regeringen, vilken kommission äger att handhava detaljerna rörande monumentets resande och avtäckande. Denna kommission mötte första gången i New York, den 25 November 1916, och höll sitt andra möte i Chicago den 10 Mars. Vid detta sista möte beslöts att öka regeringens anslag, medelst allmän subskription, med ytterligare \$25,000, så att ett fullt värdigt monument må kunna resas till vår store landsmans minne. Monumentet kommer att resas å en central och framstående plats i Washington, vilket gör det alltmera önskvärt att det är i alla avseenden John Ericsson värdigt.

SVENSKA INGENIÖRSFÖRENINGEN I CHICAGO bör självskrivet taga en ledande ställning i denna sak, och dess styrelse hoppas därför att föreningens medlemmar såväl som alla andra industriella män av svensk härkomst, som vilja hylla John Ericssons minne, mangrant söka att kraftigt bidraga till insamlandet av den summa, som måste åstadkommas, för att realisera den för oss svenskar så behjärtansvärda avsikten. Styrelsen beder därför alla av svensk härkomst, som i Amerika bygga och bo, att insända bidrag till John Ericsson-fonden. hoppas, att envar, till vilken föreningen härmed vädjar, söker i denna sak efter bästa förmåga visa sin offervillighet, och att envars bidrag göres så liberalt som möjligt, så att vi, av svensk härkomst i Amerika, tydligen kunna visa vårt nya hemlands regering, att vi också verkligen äro stolta över det erkännande, som från dess sida visats John Ericsson. I denna kritiska tid synes det vara särdeles passande att på detta sätt hedra minnet av den man, som vid en än mera kritisk tidpunkt i landets historia så väl tjänat detsamma.

Subskriptioner torde ställas till "Swedish Engineers' Society of Chicago" och adresseras till föreningens kassör, John S. Gullborg, 4631 Beacon St., Chicago, Illinois. Bidragen torde insändas med det snaraste, emedan regeringens anslag redan är tillgängligt, och kommissionen önskar att så snart som möjligt kunna börja arbetet med monumentets uppförande.

Till den, som subskriberar för \$1.00 eller mera kommer ett prydligt certifikat att sändas.

Adresserat kuvert medföljer:

# The Annual Meeting

was held at the Svithiod Singing Club, January 27. A large number of members had gathered together on this occasion to partake in the installation of the new officers and in the banquet. In the course of the evening the new officers were called upon, by Mr. Brunner who acted as toastmaster, and the new president, Mr. Iggberg, in his speech gave a few intimations as to the course to be followed during the coming year.

Mr. S. Bylander, Winnipeg, Manitoba, Canada, was a guest for the evening.

# The Regular February Meeting

was held at the Swedish Club, February 24th. Our fellow member C. Bergquist gave a lucture on "Corn Products," and, thanks to the Cook Books he freely distributed, the married members are reported to have escaped relatively easy for coming home a little "early."

# On March 31st

the Society had its gala event for the year. The Annual Dinner and Dance, held on that day in the Crystal Room of the Hotel Sherman, proved to be a social event with ever lasting pleasant memories.

The startled peasant dropt his chains At liberty's behest. And raised his back among the freed. So long bowed down by tyrants greed. Out from the dark of Russia's night There comes a form so pure, so bright, That we look on with eyes of awe As though a form divine we saw. We thought of her as monk with cowl. Dark sullen and of deeds mist foul. But now he casts aside the veil And stands with these who will not fail His brother's wrong to right: No note of vengeance in the sound. Though brothers' blood calls from the ground He grasps the hand of all oppressed And reaches forth in Freedom's quest.

-Mrs. E. S.

# FOR RENT

A SPECIAL OPPORTUNITY FOR THE RIGHT MAN—Desk space in a down-town first-class Office Building can be had by a member of S. E. S. on very moderate terms.

Inquire with the Secretary.

#### 619--620

# SWEDISH ENGINEERS' SOCIETY OF CHICAGO

Secretary's Office Hours 6-7 P. M. Tuesdays and Thursdays Saturdays 1-3 P. M.

00===0

As it would be somewhat expensive for the Society to have a box of "Jitneys" standing on the desk in our down-town headquarters (by the way, we have decided to stick around there yet for a while), the members are requested to kindly bring their own "conversation tablets" (the kind that Uncle Sam prescribes) to be used in the new telephone that is to be installed sometime this year. (How about it, Karl Gustaf?)

# **Personal Notes**

Mr. and Mrs. Iggberg passed the 10th milestone in their married life on April 6th.

We regret to hear of the illness of Mr. Lindvall's little daughter Signe Louise. Hope she will soon recover.

We are glad to announce the recovery from scarlet fever of the son of Jacob Fogel.

Mr. Göranson has started to work. Hush, don't disturb him!

Mr. Guldberg has opened a bank account, it is said. Let us hope the Society will grow in riches rapidly.

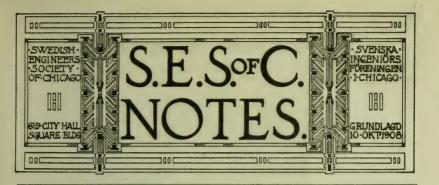
Cederoth has been conspicuous by his absence from meetings lately; but then he is such a dear fellow and so easy to entertain in one's home. Just give him a pillow and he'll sleep on the floor.

Mr. Ostergren's face is like a full moon; we presume this is due to his recent engagement. Smile, and the world smiles with you; snore, and you sleep alone.

We are very sorry to hear of the illness of Mrs. John Ericson, wife of our City Engineer, and hope for her speedy recovery.

We are very glad to learn of the recovery of Mrs. Chas. Bolin from a serious illness.

It is reported, that neither Mr. Abrahamson nor Mr. Bergquist have applied for a marriage license to escape military service, although Mr. Abrahamson has a young lady friend who writes poetry to him by the yard.



CHICAGO, ILL., MAY, 1917.

# The May Regular Meeting

will be held at the Swedish Club, 1258 North La Salle St., Saturday, May 26th, at 8 p. m. SHARP. Board of Directors meet at 7 p. m.

After the meeting Mr. G. C. Wilsnack, B. S., Ch. E., former instructor at Armour Institute of Technology, at present with Universal Portland Cement Company, Buffington, Ind., will deliver a lecture, illustrated with a number of slides, on "The Manufacture of Universal Portland Cement."

"Sexa a la Anderson."

# The Lecture Committee

announces, that in September or October will come the banner lecture of the year. More, however, about that later.

There are still three more lectures, which no member has applied to hold, and as we do not want to hire any lecturer, kindly communicate with the committee as soon as possible. Avoid the rush! First come, first served.

# **MEMBERS**

who have changed their business connections or addresses, or wish to have changes of some other nature made, are urgently requested to communicate with the Secretary before May 28th, as the membership list will be issued the first week in June.

# **NEW MEMBERS**

Eric Gunnar Leth, 820 N. East St., Indianapolis, Ind. Corresponding. Johan Löfweberg, 5319 24th Place, Cicero, Ill. Active. Erick Mattson, 3526 N. Crawford Ave. Active.

# RESIGNED

Axel Stjernberg, Chicago, Ill.

#### DEAD

G. E. Stolpe, Topeka, Kansas.

# The John Ericsson Monument Fund

contributions, received by Mr. Gullborg, amount to (Wednesday, May 16), 95 dollars. Contributors are:

Miss E. Sevaldsen,
Messrs. J. Abrahamson,
Major Eric Bergland,
John Brunner,
John C. Duner,
John S. Gullborg,
S. G. Goranson,
Carl M. Hedman,
Sven Holmes,
O. Johanson,
Adolf Kuylenstjerna,

M. D. Levin,
Emil V. Lindberg,
Einar Lindeblad,
Torvald Lundberg,
K. G. Lindwall,
C. S. Ongman,
Ivar Randall,
John Skogmark,
Carl G. Swenson,
C. A. Westberg,
F. O. Weydell,

# Våra landsmän i Amerika

Trots allt hvad man säger och skrifver i motsatt riktning, är Amerika ännu den dag som i dag är "de stora möjligheternas land." Mången ung man, som för några få år sedan anlände hit från Sverige och då kanske ansågs för obetydlig och oerfaren, bekläder sålunda numera en ansvarsfull plats, en plats, som gör innehafvaren aktad och ansedd icke blott bland landsmän utan också bland landets egna söner.

Om man närmare ger akt på dagshändelserna, speciellt på nyheterna från industrins fält, så finner man emellertid att det för en svensk är af stor vikt att han valt rätt lefnadsbana, om han skall "göra lycka", som man säger. Utsikterna för en snabb karriär äro nämligen icke lika stora på alla fält, och medan svensken på en del områden tydligen slår sig fortare fram än hans medtäflare af andra nationaliteter, beroende på medfödda anlag och god utbildning, så går det saktare för honom på andra fält, antagligen därför att de icke äro så väl lämpade för hans kynne och utbildning.

På hvilket fält är det då som svenskarne här i landet särskildt utmärkt sig? torde man fråga. Svaret kan endast bli ett: på teknikens. De svenska ingenjörerna ha sedan år tillbaka varit eftersökta här i landet och betraktas fortfarande såsom de bästa. I denna afdelning af tidningen ha våra landsmän också gång på gång under de senaste åren varit i tillfälle att läsa om unga svenska ingenjörer, som på kort tid svingat sig upp till bemärkta platser här i landet.

Så börjar inledningen till en biografi` öfver vår föreningsbroder, Birger Nauckhoff, i vår ärade kollega "Svenska Tribunen-Nyheter", och är det helt visst uppeggande för "Geni-kårens" medlemmar att drömma om en dylik runa öfver ens egna bedrifter i "de stora möjligheternas land."

# Sammanträdet den 28 April

hade lockat ett femtiotal af våra medlemmar till Svithiod, där vår auktoritet å "Pressed Steel Products", Birger Nauckhoff, höll ett särdeles lärorikt, illustreradt föredrag öfver detta ämne.

Efter föredraget samlades man vid en ypperlig sexa, som afslutades med ett angenämt nachspiel.

Som gäster för aftonen hade vi nöjet hälsa några af våra gedigna svenskar från Indianapolis, hvilka under aftonens lopp gåfvo oss utomordentliga bevis på att den svenska sången och det svenska kynnet trifves och frodas i Indianas hufvudstad.

Ingeniör E. W. Jonson från Stockholm, hvilken af Kungl. Kommerskollegium erhållit stipendium för studier i utlandet, bevistade vårt senaste sammanträde på genomresa till Sverige.

Herr J. lämnade hemlandet för omkring 11/2 år sedan och har sedan dess vistats i Shanghai för studerandet af betongindustrien.

Den gamla satsen att hvarhelst något större ingeniörsarbete pågår svenskarna spela en hufvudroll, bekräftades af herr J., som i en del upplysningar om "Midtens rike" bland annat omnämnde, att den som för kinesiska regeringens räkning leder en del större flodregleringar är svensk.

# Tänk hvad nytta man kan ha-utaf en telefon

Medlemmar af S. E. S., som på grund af lättja äro förhindrade deltaga i sammanträdena, såväl som medlemmar som ställa till bjudningar den dag föreningen sammanträder, torde taga i betraktande de stora fördelar som skulle vinnas genom arrangerandet af speciell telefonlinie mellan hemmet och möteslokalen.

En telefon kommer inom närmaste framtiden att installeras i föreningens hufvudkvarter, 619 City Hall Square Building.

# PERSONAL NOTES

Den 28 april fyllde vår celebre vän Victor Sparr ? år. Dagen till ära gafs å Palais Sparr en elegant middag för utvalda medlemmar inom härvarande diplomat- och ingeniörskår.

WANTED-TO KNOW. The whereabouts of George Axell. (Familjen Sparr.) Adv.

Iggberg was 35 years old on May 9.

Carl Save, Architect, Jerome, Idaho, is the wording on a letterhead recently received by the Secretary of our Society. The aforesaid Save says, he will not return to Chicago, as long as the going is good out west.

Lillia Helen (kammar sitt hår, och då det brakar i kammen frågar hon sin mamma): — Mamma, hvarför brakar det i kammen, när jag kammar håret?

Mamma: - Det är elektricitet i håret, lilla Helen.

Helen (funderar): - Mamma, ä' vi inte en underlig famili?

Mamma: - Hur så?

Helen: — Jo, jag har elektricitet i håret och farfar har gas i magen.
(Lånad från Shakespeare.)

\* \* \*

Men! Axell påstår att elektricitet är billigare än gas. Hvad säges om detta, Westerberg?

\* \* \*

Cederoth has sore feet, it is said. Will some one take him to our next meeting in a limousine? He's just dying to come.

\* \* \* \*

Mina herrar!! I, för, ty, och emedan — och så lämnade tåget. Han arbetar i South Chicago fortfarande.

\* \* \*

No one questions the quantity nor quality of brains in the Swedish Engineers' Society, but it cannot be run on brains alone, we also need money; after which remark the boys fell all over themselves to pay their dues for 1917????

\* \* \*

It is reported that Abrahamson is in love-with his new job.

\* \* \*

Our office telephone is still conspicuous by its absence.

\* \* \*

The Editor of Personal Notes is always eager to hear anything of a religious, scientific, or scandalous nature; please address him at 619 City Hall Square Building. All communications strictly confidential. Confide in me as you would in your father confessor.

\* \* \*

Just as we go to press we learn that Bolin has just given birth to—an idea, which he will explain at our next meeting.

\* \* \*

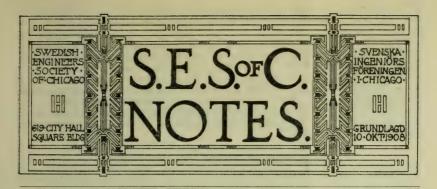
"Före detta Gardisten" anser att då en låda "strömming" med smeknamnet "sardiner" kostar en hel dollar etc., så kan inte t—n bjuda en massa hungriga ingeniörer på sexa för ingenting!

# Be Patriotic! - Do YOUR bit!

and write something for the "'Notes." You have plenty of "ammunition" stored up, and now is the time to use it by enlisting in the staff of "Notes."

Do not be a "Slacker," "sign up," and take your share in promoting the aims of, and serving YOUR Society.

Department of Publication.



CHICAGO, ILL., NOVEMBER, 1917.

# REGULAR MEETING

of the Society will be held at THE SVITHIOD SINGING CLUB, Saturday, November 24th, 1917 at 8:00 P. M. sharp.

BUSINESS MEETING AND STAG PARTY.

Remember the Place and the Date.

The Board of Directors meet 7:00 P. M.

#### NEW MEMBERS

- N. E. Wahlberg, Kenosha, Wisconsin, Active,
- C. J. Nyquist, 11 West Goethe Street, Active.
- P. N. Engblom, Manila, Philippine Island, Corresponding,
- Edw. Turnquist, 2016 Warner Avenue, Active.
- G. L. Karlson, 222 Loomis Street, Active.
- B. O. Pallin, 1436 Victoria Avenue, Active.

#### THE REGULAR MAY MEETING

was held at THE SWEDISH CLUB, 1258 North La Salle Avenue, May 26th, 1917.

The Treasurer, Mr. Gullborg, stated that, owing to the expence connected with the issuance of a memorial certificate to the contributors to the John Ericsson Monument Fund, the Commission which has charge of this matter had decided that in place of the promised certificates a plain acknowledgement of the money received would be sent each contributor to the Fund.

The lecturer for the evening was Mr. C. G. Wilsnack. Chief Chemist, Universal Portland Cement Co., Buffington, Ind. The lecture, delivered over the subject, "The Manufacture of Universal Portland Cement," illustrated by a large number of slides and also supplemented by samples of raw materials in various states of production as well as the finished product, proved intensely interesting. The Cement Work at Buffington, Ind., a subsidiary to the United States Steel Corporation, is the largest in the world and produces annually 12,000,000 barrels of cement. At the close of the lecture, the members showed Mr. Wilsnack their appreciation of his splendid talk by a standing vote of thanks.

The Treasurer requests all delinquent members to pay their dues as soon as possible. It will be well for the members in this connection to refresh their memory as to what our By-Laws require of a member in order that he shall have the right to vote at the coming election.

All members who are serving in the U. S. A. or U. S. N. are relieved from paying their dues for the duration of the war. All members who are affected by this ruling of the Board of Directors will kindly communicate with the Secretary so as to enable him to place such member on the Honor Roll, and advise the Treasurer to make the necessary changes in his records.

#### THE NOMINATION COMMITTEE

Announces the candidates for officers for the year 1918 and members of the Board of Directors 1918 and 1919 as follows:

PRESIDENT:

Axel Akers, John E. Ericsson.

VICE PRESIDENT:

Victor Nicholson, Hugo S. Hasselquist.

SECRETARY:

O. E. J. Abrahamson, Erland Safstrom.

Erla

TREASURER: S. G. Göransson,

Erland F. Engwall.
BOARD OF DIRECTORS:

Fred. Seaberg, R. W. Fogel, K. G. Lindwall,

Hugo Emanuel Westerberg,

John Sahlin, John H. Schott.

The election will be held at the December meeting. Send in your ballots early.

# "WITH THE COLORS."

Company A—333 Machine Gun Battalion, Camp Grant, Rockford, Ill., den 14 oktober 1917.

Vår älskvärde sekreterare har bett mig bidraga till detta nummer med en skildring av livet och levernet i denna "Camp" — precis som om jag icke skulle hava något annat att göra. Innan jag börjar anstränga den välvillige läsaren, beder jag vördsammast om överseende, i den händelse stilen kommer att förefalla mer än lovligt torr och nykter, men tre veckors frånvaro från Chicago har ett säreget torrläggande inflytande å såväl kropp som själ.

Kennedy, min sängkamrat — f. d. polis, vikt 250 lbs. — är en livlig anhängare av Sherman och håller oss varma dag och natt med sina oförfalskade, fräsande Irlands-svordomar, vilket vi uppskatta i allra högsta grad. Vi äro nämligen ännu nödsakade att hålla ångan uppe på egen hand, i och förty och emedan — som George brukar säga — Uncle Sam (eller kanske rättare Farbror Samuel) ännu icke har hunnit med att sätta fyr under de stora ångpannorna, vilka nu hålla på att installeras.

Det är egendomligt hur mycket bättre man sover på en halmsåck än på ejderdunsbolster. Själv har jag aldrig försökt det sistnämnda. Som utelivet här är tämligen inskränkt, och ett av de största nöjena — vila, är det ju intet märkvärdigt i att finna varje man i Ijuvlig sömn redan klockan 9 på kvällen eller, med andra ord, vid den tid då Ní, civila underhuggare, bereda eder för nattliga utsvävningar.

Efter en fridfull natt, endast störd av diskreta snarkningar och liknande ljudförnimmelser, börjar vår dag halv sex på morgonen, en hel

timme tidigare än tuppen börjar gala. (Allt för galet.)

Det är tämligen svårt att beskriva — och i vissa fall förbjudet — just vad vårt dagliga arbete består av, men huvudsumman är, som var och en förstår, att göra var enskild individ lämpad för det stora mål, vi inom kort skola realisera.

Farbror Samuel (Uncle Sam) har icke hunnit med att giva oss alla riktiga geväder ännu, men här vila inga ledsamheter. Vi fabricera våra egna gevär av såp- och sockerlådor och göra dem så naturliga, att de hava den allra största likhet med verkligheten. Om vi nu till på köpet måla dem röda, kanske vi icke behöva några andra medel att skrämma "Kaisern" på flykten.

Mat och kläder och för övrigt allt annat, som så välvilligt utdelas till oss, är det bästa tänkbara. De enda som hava något att anmärka äro de. som i civila livet fingo nöja sig med ett mål om dagen och kanske ett bad om året, om de voro lyckliga nog att av en händelse "trilla i plurret".

Ännu förefaller ju allt här mer likt lek än allvar, men dagarna och veckorna fly fort, och snart komma vi ansikte mot ansikte med den stora verkligheten. Då gäller det att spotta i nävarna och slåss utan bara f-n, som Albert Engström säger. Och då blir det synd om "Kaisern". Han kommer att få det hetare om öronen än själve Lucifer någonsin kan tänka sig.

Och sedan blir det vaktombyte, och så blir det er tur, alla ni gubbar. som nu sitta hemma och njuta i lugnan ro med edra whiskygroggar och virapullor. Lycka till;

AL. CEDEROTH.

#### THE NORWEGIAN ENGINEERS AND ARCHITECTS

in United States and Canada celebrated a reunion the week of September 24th, and the following telegram was sent to the Organization on this occasion:

Mr. Giaver

Norwegian Club,

2346 North Kedzie Avenue.

Chicago, Illinois,

The Swedish Engineers' Society of Chicago extend to the Norwegian Colleagues heartiest greetings and wishes for a pleasant reunion celebration. F. W. Iggberg, President.

# AN "INVASION"

"Sveriges första kvinnliga ingeniör har i dagarna utexaminerats från Chalmers Institut i Göteborg. Det är fröken Vera Sandberg, dotter till aflidne kaptenen vid Kronobergs regemente Viktor Sandberg och hans efterlevande maka, född Björkman. Fröken S. är född i Småland på Hangers egendom och är i besittning av en småländskas energi, kraft och sega uthållighet.

The above clipping from an issue of "Svenska Kuriren" was sent to the Secretary by Mr. Ericson (Zinc)) who is very proud to be able to claim a close kinship with fröken Sandberg.

# "STAG"

The fascinating exclusiveness of the word "STAG" ought to be a guaranty that all the members who not are at the front or otherwise prevented from coming, should be present at this affair, and by coming

en masse inject new life in the Society.

The chief of the cuisine at the Svithiod Singing Club insists that nothing is too good for the Swedish Engineers, which means that the turkey, cranberries and everything else that goes to make a Thanksgiving-Stag-Party a success, are going to be just right. Entertainers? Well, we are bound not to give away any secrets.

#### APROPOS THE ELECTION.

The fact that the candidates for officers of the S. E. S. nominated for the next year are, without doubt, men willing to carry out the obligations they incur by accepting the honor conferred on them by their fellow members at the election, must not be interpreted as a slam at the present incumbents; these persons, however, judged by their performances in office, conceding that a few inane interruptions of an infamous state of lethargy, may be so termed, certainly have not acted in accordance with their pledges and promises.

This time the Nomination Committee has seen to it that the two aspirants to the President's chair are both tried and true men, absolutely sure to be free from the mental and moral lassitude that will drag down a six months unwholesome vacation on our Society.

Finally it gives the Nomination Committee great pleasure to nominate for re-election our Secretary, Mr. Abrahamson, who has done splendidly in spite of handicaps.

NOMINATION COMMITTEE.

#### PERSONAL NOTES.

Have you seen Ongman's smile lately? Mrs. O. presented him with an 8-pound boy on October 12th.

It is reported that Iggberg is back in town. We have not been able to verify it up to going to press.

Karl Gustaf Lindwall has a son. Bra gjort, Kalle!

Cederoth is sojourning in Rockford. We are glad to hear from him. Don't fail to read his letter in this issue of S. E. S. Notes.

Our Lecture Committee has "flew the coop." Bergquist is in Philadelphia and Sven Holmes is out West. Hva' f—n ska' man göra för talare nu på våra möten?

The House Committee have been out on pasture since last Spring. They are now all fat and sleek, so we will doubtless have some fine doings between now and New Year.

Don't forget November 24th. "There'll be a hot time in the old town that night."

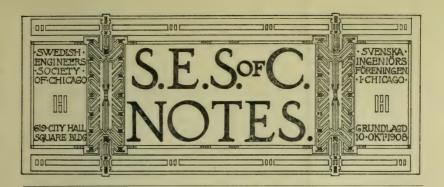
Ask Brunner to tell you his skunk story, it's a peach—the story of course, not the skunk.

Pat O'Grady had been in the U.S. A. four months and wrote a letter home to Ireland. It read as follows:

"Dear Mither I letter you, I am working now on a house what scrapes the sky they tell me. I'm carrying masons to the hod, that is I only carry the bricks and the other fellows do the work. I'm sindin you tin dollars and I'd sind ye a cow only I'm afraid her horns wouldn't go through the Post Office. I expect to be a policeman soon.

Your loving son, Pat."

LOST—The Lecture Committee, somewhere between New York and San Francisco. Finder please return same to S. E. S. Liberal reward.



CHICAGO, ILL., DECEMBER, 1917.

# DO YOUR DUTY

To YOUR COUNTRY
To YOURSELF and

# To THE SWEDISH ENGINEERS SOCIETY

and deliver YOUR vote at 8 o'clock sharp, at

#### SVITHIOD SINGING CLUB

(624 Wrightwood Ave.)

This will be our last meeting for 1917.

After the meeting a splendid "sexa" will be served.

On this occasion you will be given a chance to bid adieu to the OLD year and to the OLD lazy House Committee.

# En Glad och Angenäm Jul och Ett Godt Nytt År

tillönskas våra läsare och gynnare.

REDAKTIONEN AF "NOTES."

# At the November Meeting

a resolution was introduced proposing that the Society, in recognizance of the splendid work carried on by the Swedish Societies' Old People's Home Association, tender said Association a sum of Fifty Dollars (\$50) to constitute the S. E. S.'s membership fee in the Association for the years 1918 and 1919. The resolution was unanimously accepted, and were Messrs. J. Brunner, P. Parke and C. G. Axell appointed as the Society's representatives to the Swedish Societies' Old People's Home Association.

※ \*

To say that our November meeting was a success is putting it mild. It was the most enthusiastic gathering we have had for at least two years. The boys were all glad to get together again after several months of inactivity.

The House Committee made up to a great extent for its laxity of passed months and put over a stunt long to be remembered. The feminine warblers made up for their lack of Grand Opera voices by their bubbling good humor and frolicking fun. The manly beauty of Rissler and Nicholson (to say nothing of scores of other Adonises) seemed to be irresistable to these petticoats who smiled and beguiled for further orders.

The star number, however, was our dear friend George, who for one wild moment thought nature had intended him for a waiter instead of an engineer. Ah, capricious fate, that you should have put such a thought into his bean. He meant well enough (George of course, not fate) and started out with a load of dishes from the kitchen to the butler's pantry. Half way across the floor, he caught sight of the girl with the red dress and green eyes and it was all off with George; 577 plates were dropped and broke into a thousand pieces. A little further on Baby Ray with the dimpled cheeks appeared and George dropped 918 more plates. When he came to the pantry, he had one plate left. Ah, cruel fate, to trifle with him thus! Now he must pay a dollar down and a dollar a week for the rest of his life to pay the plates.

# Somewhere There's an Ericsson

(Reprinted from The Detroit Free Press.)

At this time of gloom about the submarine menace, which is apparently as grave as the worst reports make it appear, the United States might find a lesson in its own history. People were as much disturbed in 1861 by the aspect of the South's navy strength as they are today by the threat of the U-boat, but American genius and American enterprise averted impending disaster then and they can do as much now.

Contemporary records preserve for us of this generation the record of the North's alarm that year. The idea of armor-plating wooden ships had been developing in Europe for some years and it was known that the Confederacy was adopting it. Congress received a report on this subject in August, and immediately directed an examining board to investigate the matter. Its report was presented September 16, and recommended experiment with three proposed ships, two of the ironclad type and the third a so-called "floating battery" designed by an inventor named Ericsson, of New York.

Ericsson's craft was of course the Monitor, since famous in history. It was his contribution to an invention in which three pioneers had their part. Theodore R. Timby of New York, and Captain Cole of England, having also devised somewhat similar designs. When Congress appropriated the money to pay Ericsson for his boat, it stipulated for completion of the "battery" within 100 days from the signing of the contract, which was dated October 5, 1861, and incorporated the extraordinary provision that its test should be by withstanding the fire of an enemy's batteries at short range. The Monitor was delivered March 5, 1862.

March, 8, three days later, the South won the race against time by throwing the completed ironclad, the Merrimac, into the naval conflicts in Hampton Roads, and the instantaneous result was confirmation of the worst fears about the novel addition to earth's water fighters. The pride of the North's fleet succumbed to the terrible Merrimac with hardly a show of opposition.

That night the Monitor entered Hampton Roads from New York. The morrow saw the black clouds of despair swept away with as impressive certainty as had accompanied their gathering, for the conquering Merrimac was stopped short in her career. The "cheesebox on a raft," so very recently a mere vague idea in its inventor's mind, had revolutionized naval warfare. The check for the ironclad was found.

What our fathers did, we can do. It is no greater task to find the answer to the submarine riddle than it was to think out the type of ship to meet the ironclad fifty-five years ago. American genius is not dead. Somewhere in the United States, we must hope and believe, there lives a man today who has in his brain the idea that is yet to be realized in concrete form for his country's salvation. It may be that the conqueror of the U-boat is at this moment more than an idea. The Monitor was advanced to the stage of where speedy building could begin when she was wanted. The opponent of the under-sea boat may be discovered among the many plans our inventors are developing in their laboratories. Or it may still be lying dormant in some mind, to be born soon in physical shape. But that some American will yet bring forth the needed invention all our history leads us to believe.

# Are YOU the ONE?

# Personal Notes

There is a rumor that OUR president will surprise us and be present at the last meeting of the year.

\* \*

Ask Axell what China is worth in large lots.

\* \*

Brunner has promised to tell his skunk story at the December meeting,

We were 72 at the November meeting.

\* \* \*

Don't miss the December meeting; if you do, you will regret it. More good times in store for you. Be sure and come!

\* \* \*

Westerberg är lika oppkäftig som vanligt, så det syns att han har tillfrisknat.

Be sure you vote—to do this, pay your dues.

. . .

Lots of good timber to choose from on the ballot.

\* \* \*

Found—The House Committee. The Lecture Committee is still missing.

# Annonser

Flera förmånliga anställningar för spirituella tecknare och kåsörer finnas lediga i TRASDOCKANS Redaktion.

Ansökningar, åtföljda af frejdebetyg, stil- och teckningsprof, torde snarast möjligt insändas till GEORGE AXELL, 3732 N. Racine Avenue, Chicago, Ill.

Obs.; Endast förstklassiga förmågor antagas.

GYNNA VÅRA ANNONSÖRER!

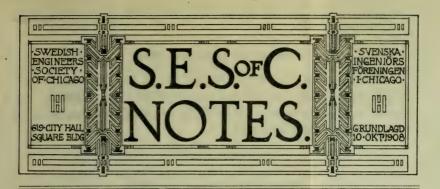
# En Glad Nyhet

Enligt hvad vi från god källa erfarit, skall ett jubileumnummer af "TRASDOCKAN" utkomma till årsfesten i januari 1918. Vi hänvisa till annonsen i detta nummer och önska samtidigt framhålla önskvärdheten af att våra medlemmar måtte bidraga med EN RIKLIG KOLLEKT af kraftiga, satiriska och välmenande uppsatser samt skildringar från teknistlifvet i U.S.A.

WHATEVER you do, attend the last meeting for 1917 of Swedish Engineers' Society, and

# Start the New Year right!





CHICAGO, ILL., JANUARY, 1918.

Saturday, January 26, 1918 8 o'clock P. M.

# The Swedish Engineers' Society of Chicago

holds its

# ANNUAL MEETING

INFORMAL

at the Swedish Club

# **PROGRAM**

Business meeting.
Installation of officers for 1918.
Banquet.
"Trasdockan."
Nachspiel.

Officers for 1918 elected at the regular meeting, Saturday, December 29, 1917:

JOHN E. ERICSSON, President. VICTOR NICHOLSON, Vice-President. J. ABRAHAMSON, Secretary. S. G. GÖRANSON, Treasurer.

#### Board of Directors 1918

FRED. SEABERG, R. W. FOGEL, K. G. LINDWALL (New), JOHN BRUNNER (remaining from 1917), C. G. AXELL (appointed to fill the vacancy left by G. A. Akerlind, who has resigned from the Board of Directors).

# Nominating Committee 1918

CARL F. ANDERSON, J. FOGEL, JOHN S. GULLBORG.

To the Auditing Committe for 1917, have been appointed:
AXEL AKERS, WALTER B. ANDERSON, GUST. DAHLBERG.

## NEW MEMBERS.

G. P. Lagergren, 5419 University Ave.—Active Member.
Joel Lundquist, 3012 Prairie Ave.—Active Member.
Carl E. Magnus, 1508 Larrabee, Y. M. C. A.—Active Member.
Ronald E. J. Nordquist, 202 N. Centusk Av.—Active Member.
M. A. Seaholm, 903 N. 8th Av., Maywood.—Active Member.

## DEAD.

Frank A. Peterson.

# RESIGNED.

Frank G. Gustafson.

# DROPPED FOR NON-PAYMENT OF DUES.

E. J. Swanson.

# WITH THE COLORS.

C. E. Rang, 25th Regiment Engineers, Camp Devens, Mass.

# Swedish Engineers' Society of Chicago

# CONSTITUTION AND BY-LAWS LIST OF MEMBERS 1917

Founded October 10, 1908 Incorporated June 25, 1912



1 1817

OFFICE AND LIBRARY ROOM
619-620 City Hall Square Building, 139 North Clark Street
Telephone Central 5607
Chicago, III.

5W 917

# Past Presidents

1908 HENRY NYBERG

1909 HENRY NYBERG

1910 G. A. M. LILJENCRANTZ

1911 DR. ERNST J. BERG

1912 JOHN ERICSON

1913 HENRY ERICSSON

1914 JOHN ERICSON

1915 ALBIN RISSLER

1916 JOHN BRUNNER



# Honorary Members

LILJENCRANTZ, G. A. M.
Charter Member, Honorary Member.
Sweden.

#### CARLSON, DR. ANTON JULIUS

Honorary Member.

Professor of Physiology, University of Chicago.

Res., 5228 Greenwood Ave., Chicago, Ill.

#### OFFICERS

W. F. Iggberg	President
Clarence S. Ongman	. Vice-President
O. E. J. Abrahamson	Secretary
John S. Gullborg	Treasurer

#### BOARD OF DIRECTORS

Peter Parke C. G. Axel Albin Rissler
John Brunner G. A. Akerlind
And the Officers

#### LECTURE COMMITTEE

C. Bergquist, Chairman John E. Ericsson Sven Holmes

#### LIBRARY COMMITTEE

Alef Cederoth, Chairman Oscar J. Borgman Erland Säfström

#### HOUSE COMMITTEE

C. M. Hedman, Chairman K. G. Lindwall R. W. Fogel

#### SPECIAL HOUSE COMMITTEE

John E. Ericsson, Chairman
C. G. Axell C. A. Bolin C. E. Carson
K. G. Lindwall

#### PUBLICATION COMMITTEE

Clarence S. Ongman, Chairman
O. E. J. Abrahamson
C. Bergquist
Alef Cederoth
K. G. Lindwall

# Constitution and By-Laws

of the

# Swedish Engineers' Society of Chicago

Adopted November 15th, 1913

#### ARTICLE I.

## Name and Object of the Society.

Section 1. The name of the Society shall be "The Swedish Engineers' Society of Chicago." Sec. 2. The object of the Society shall be to promote knowledge, advancement and cooperation among the technical men of Swedish descent engaged in engineering and industrial operations in Chicago and vicinity.

# ARTICLE II.

#### Membership.

Section 1. The members shall be divided into five classes: Honorary, Life, Active, Corresponding and Associate.

- Sec. 2. Qualifications. To become a member it is required to be of Swedish descent and to meet the requirements as set forth below.
- Sec. 3. Honorary Member shall be a man of prominence in the sciences or industries or who has made himself deserving of the Society's highest regard.

- Sec. 4. A Life Member shall be an active or corresponding member of the Society who has paid to the treasury at one time the sum of Fifty (50) Dollars. Such life member shall enjoy all privileges of an active member.
- Sec. 5. An Active Member shall be one possessing technical education, from some school or college, or shall be one who, through self-tuition and ability, has worked himself up to a position which requires engineering knowledge.
- Sec. 6. A Corresponding Member shall be residing at a distance of at least forty (40) miles from the City of Chicago. The requirements shall be the same as for an active member. The transfer of an active member to this group shall be made semi-annually.
- Sec. 7. An Associate Member shall be one who cannot qualify as active or corresponding, but who is interested in the Society's activities and who may, by his position in the community, be expected to aid the aims of the Society.

#### ARTICLE III.

#### Admissions and Expulsions.

Section 1. Application for membership shall be made on blank, the form of which is determined by the Board of Directors, and shall contain information on the several points previously enumerated and a declaration that the applicant will abide with the rules and regulations of the Society. The applicant shall

refer to at least two members who are acquainted with the applicant and can certify to his desirability as a member.

Sec. 2. The application must be accompanied by an admission fee of two (2) dollars and shall be submitted to the Secretary, who shall post the name of the candidate and proposers on the bulletin board for at least one week. The Board of Directors shall then decide whether the applicant is acceptable or not, and shall determine to which class he may be referred. If the applicant is not accepted the admission fee shall be refunded.

Sec. 3. An honorary member shall be proposed in writing, which shall give the reasons for the proposal and shall be signed by at least ten active members in good standing. He shall be elected only by unanimous vote of the entire Board of Directors, after the name of such candidate has been posted in the regular way. The voting to be done by letter ballot if necessary.

Sec. 4. Membership of any person shall date from the date of his election. A rejected applicant may renew his application for membership at any time after the expiration of one year from the date of the ballot rejecting his previous application.

Sec. 5. A member of the Society may resign his membership by a written communication to the Secretary, who shall present the same to the Board of Directors, who shall accept his resignation, if all his dues have been paid. Sec. 6. Upon a written request of ten or more active members in good standing, giving cause therefore, a member of the Society may be expelled by the Board of Directors, if there appears to be sufficient reason. The accused member shall first be advised of the charges against him and given an opportunity for defense. If expulsion is found justified, the member shall be notified, but unnecessary publicity should be avoided.

#### ARTICLE IV.

#### Dues.

Section 1. The yearly dues for an active member shall be six (6) dollars. The yearly dues for a corresponding member shall be two (2) dollars if residing in the United States or Canada, and shall be one dollar if residing in other countries. The yearly dues for an associate member residing within forty (40) miles of the City of Chicago shall be four (4) dollars. The yearly dues for an associate member residing forty (40) miles or more from the City of Chicago shall be two (2) dollars. All dues shall be paid in advance. An honorary member shall be exempt from payment of dues.

Sec. 2. Any person whose dues are more than six months in arrears shall be notified by the Secretary or Treasurer. Should his dues become nine (9) months in arrears, he shall lose his right to vote and to receive the Society's publications, and should his dues become one

year in arrears, he shall forfeit his connection with the Society. The Board of Directors, however, may for cause deemed sufficient, extend the time for payment and may relieve any member from paying part or all of his dues when circumstances or the interests of the Society are deemed to justify such action.

#### ARTICLE V.

#### Officers.

Section 1. The officers of the Society shall be as follows:

- Sec. 2. A President, who shall preside at the meetings and perform the duties pertaining to a presiding officer. He shall also be the chairman ex-officio of any committee he may appoint, and whose meetings he may attend.
- Sec. 3. A Vice President, who shall, in the absence of the President, perform all duties required of that officer.
- Sec. 4. A Secretary, who shall attend to the official correspondence of the Society, receive applications for membership and keep records of the meetings and all official transactions.
- Sec. 5. A Treasurer, who shall, under direction and approval of the Board of Directors, handle all funds of the Society, collect dues and pay bills with check on a Chicago bank and keep books of all such transactions, enabling the Board of Directors at any time to determine the Society's financial standing.

The Treasurer shall be bonded in a surety company at the expense of the Society.

Sec. 6. The Board of Directors shall consist of the officers and five additional active members elected as stated in Article VI.

Sec. 7. The President, as chairman of the Board of Directors, shall call meetings of the Board whenever deemed desirable, and shall together with the Board establish such rules and regulations for the Society's headquarters, when such exists, as they deem proper, and shall with the Board exercise a general supervision over the Society's affairs. At the request of three members of the Board of Directors an extra meeting may be called.

Sec. 8. Standing Committees. The incoming President shall, at the annual meeting, appoint a Committee on Lectures, a House Committee and a Library Committee. The Committee on Lectures shall consist of three members, whose duties it shall be to arrange for the reading of papers, to lead discussions and to otherwise contribute in making the meetings interesting. The House Committee shall consist of three members. This committee shall, under supervision of the Board of Directors, have charge of the Society's property, arrange for quarters and entertainments, etc., but must not incur greater expenses to the Society than given by written authority from the Board of Directors. The Library Committee shall consist of three members. This committee shall have supervision over the Society's library, receive books,

magazines and pamphlets, shall list same and shall submit to the Board of Directors estimates of expenses desirable to extend and maintain the library.

Sec. 9. Special Committees and the Appropriation of Money. A proposition to appoint such a committee or to appropriate money shall be presented at a regular meeting of the Society, and, if sustained, the Board of Directors shall take the proposition under advisement and decide whether the object is justified and if the necessary expenses can be met by the Society. In such case, the Board will select a committee and give it instructions as to the scope of its work and the amount of money available for the purpose. A two-third majority of the Board shall be required to decide, the votes to be cast by letter ballot if necessary.

#### ARTICLE VI.

#### Nomination and Election of Officers.

Section 1. The President, Vice President. Secretary, Treasurer and the Directors shall be elected from the active or life members, in the month of December annually. The officers shall hold office for one year and the directors for two years. Three directors shall be elected in the even years and two in odd years.

The term of office of each officer shall begin at the close of the annual meeting in January for the year for which he was elected, and shall continue for the period above named or until a successor is duly elected. Should any officer or member of the Board of Directors be unable to serve, such vacancy shall be filled by a life or active member elected by the Board of Directors.

Sec. 2. There shall be a Nominating Committee composed of six (6) members of the Society, three of which shall be appointed by the Board of Directors and three of which shall be elected annually when the officers of the Society are elected. This committee shall elect their own chairman. It shall be the duty of this committee to meet in the early part of November of each year and nominate the candidates for officers and directors named in Article V.

Sec. 3. The three elective members of the nominating committee shall be nominated and elected at the regular December meeting of the Society.

Sec. 4. The Secretary shall mail, on or before the last Thursday in November of each year, to each member entitled to vote, a ballot containing the names of the nominated candidates for the several offices falling vacant. Under the names of the nominees for each office so printed there shall be provided a space for the use of the voter if he desires to substitute another name. The voter shall enclose said ballot in an envelope in a second envelope marked "Ballot," seal the same, and shall then write his name thereon for identification. The ballot thus prepared and enclosed shall be

mailed or delivered unopened to the Secretary of the Society. The Secretary or Treasurer shall certify to the competency and signature of all voters. A ballot without the autographic endorsement of the voter written on the outside envelope shall be marked "Defective."

Sec. 5. All ballots shall be transmitted by the Secretary unopened to the presiding officer of the December meeting. The presiding officer shall then declare the election closed and shall appoint three tellers who shall first destroy all the defective ballots unopened. They shall then open and destroy the endorsed outer envelopes marked "Ballot," and then open the inner envelope and count the votes. The opening of both the outer and inner envelopes as well as the counting of the votes shall be done in open meeting after the election is closed. A ballot which contains more names than there are offices to be filled is thereby made "Defective," and shall be rejected by the tellers. The tellers shall certify the results of the voting to the presiding officer, who shall then announce the candidates having the greatest number of votes for their respective offices and declare them elected for the ensuing year. A tie vote shall be decided through revoting by the voters present.

Sec. 6. Questions of vital interest to the policies and existence of the Society, shall be submitted in writing at a regular meeting of the Society, and may be, by a majority vote of the members present at such meeting, or-

dered to be presented for a special ballot to be cast at the next regular December meeting. This ballot shall briefly state the pro and con of the question. "Yes" or "No" should be voted and the ballot enclosed in the same envelope as that containing the official ballot. A two-third majority of the votes cast shall be necessary to carry the question.

#### ARTICLE VII.

## Meetings.

Section 1. The regular meeting of the Society shall be held each month at such hour and at such place as may be determined upon. Ten active members in good standing shall constitute a quorum for transaction of ordinary business, with the limitations as stated in Article V, Sec. 9, but questions of vital importance to the Society shall be submitted to letter ballot as described in Article VI, Sec. 6.

Extra meetings may be called by the President on his own initiative or if petitioned by at least ten active members in good standing, who shall sign such petition and state the object of the meeting. At such extra meeting only such business shall be transacted as stated in the notice to assemble.

- Sec. 2. The annual meeting shall be the first reuglar meeting.
- Sec. 3. Members have the privilege to invite friends to the meetings.
  - Sec. 4. "Robert's Rules of Order" to govern.

#### ARTICLE VIII.

#### Permanent Funds.

The Commonwealth Edison first mortgage 5% gold bond No. 18095 of one thousand dollars par value and maturing in 1943 shall be held by the Treasurer of the Society, and only the interest thereof shall be used for current expenses. To this permanent fund shall be added the dues for life membership and such sums as the Board of Directors from time to time may decide to add. This permanent fund shall not be drawn upon unless decided upon in the following manner: The proposition shall be presented in writing at a regular meeting at least three months before the annual election, and may, by a majority vote of the members present at such meeting. be ordered to be presented for a special ballot to be cast at the next regular December meeting. This ballot shall briefly state the pro and con of the proposition. A two-third majority of the votes cast shall be necessary to carry the proposition.

#### ARTICLE IX.

#### Amendments.

Proposed amendments to this constitution must be reduced to writing and signed by at least ten active members in good standing, and shall be submitted to the Board of Directors, who shall have the petition with the names of the petitioners and the proposed amendment printed with the call for a regular meeting of the Society. Should such a meeting by a two-thirds majority vote recommend the amendment as proposed or as amended by the meeting, then the question shall be submitted to a "Special Ballot." Such ballot to contain brief statement of the reasons for the change pro and con. A two-thirds majority of the votes cast shall be necessary to carry the amendment.

Amendments so adopted shall take effect immediately after the next annual meeting in January.

#### ARTICLE X.

## Dissolution of the Society.

Section 1. Should the number of active members fall below twenty, a proposition may be entertained to disband, but this must be made in writing and addressed to the Board of Directors. An extra meeting shall then be called not earlier than six (6) days after the issuance of such notice, and no other business shall be transacted at such meeting.

Sec. 2. Should the meeting so held by a two-thirds majority decide on dissolution, then the question shall be submitted to all voting members by letter ballot and a two-thirds vote of all active and life members shall be necessary for the dissolution of the Society.

Sec. 3. A history of the Society shall then be written, and, together with documents.

books, correspondence and the gavel, or other relics and valuables the Society may possess, be deposited with the Swedish Historical Society of America, or, if this Society should not exist at the time of the dissolution or not be able to take care of the property turned over, then the Swedish Societies' Old People's Home Association of Cook County, Illinois, should be requested to take into safe-keeping all the belongings until another Swedish Engineers' Society may be formed in the City of Chicago.

Sec. 4. Should any funds belonging to the Society be in existence at the time of dissolution, such funds and money shall be turned over to the party taking custody of the Society's property as a compensation for services to be rendered.

#### ARTICLE XII.

# Order of Business.

The order of business shall be as follows:

- 1. Call to order by the President.
- 2. Reading of the minutes.
- 3. Report of Board of Directors.
- Reports of standing and special committees.
- 5. Unfinished business.
- 6. New business.
- 7. Reading of papers and discussion of same.
- Election of officers (at the December meeting).
- 9. Adjournment.

# List of Members

# ABRAHAMSON, O. E. J.

Active Member, 1913.
Secretary, 1917.
With International Harvester Co.
McCormick Works.
Res., 4825 Winthrop Ave., Chicago, Ill.

#### ACKANDER ALBERT B.

Charter Member, Corresp. Member, 1908. Res., Ocean Springs, Mo.

#### ACKERLIND, D. M.

Corresponding Member, 1916. Automobile Designer, Vilie Motor Vehicle Co., Moline, Ill. Res., 517 42nd St., Rock Island, Ill.

#### ADAMSON, ERNST HJALMAR

Active Member, 1916.
Draftsman at Armour & Co., Chicago, III.
Res., 7106/Drexel Ave., Chicago, III.

#### ADLER, NILS

Active Member, 1914. With Crane Company. Res., 4940 N. Kedzie Ave., Chicago, III.

## AHLBERG, G. A. F.

Corresponding Member, 1910. With Ahlberg Kerosene Carborator Company, 2539 Oliver Building, Pittsburgh, Pa.

#### AHNGER, ALFONS

Active Member, 1912. With Mark Mfg. Co., Indiana Harbor, Ind. Res., 6426 Vernon Ave., Chicago, Ill.

## AKERLIND, G. A.

Charter Member, Life Member, 1908. Secretary, 1908-09-10-11-12-13-15. Insp. Engineer, Bridge Dept., City Hall Chicago, Ill. Res., 536 Rush St., Chicago, Ill.

## AKERLIND, J. AD.

Corresponding Member, 1909. Constructing Engineer. Res., Hedemora, Sweden.

## AKERS, AXEL

Active Member, 1913. Treasurer, 1915, 1916. Mechanical Engineer, City Hall, Chicago, Ill. Res., 7357 Vernon Ave., Chicago, Ill.

#### ALINDER, HENRY

Corresponding Member, 1910. With Allis-Chalmers Company. Res., 598 34th St., Milwaukee, Wis.

## ALSTERBERG, GUSTAF

Active Member, 1914.

Tester, Universal Portland Cement Co., Buffington, Ind.

Res., 9953 Ave. M., East Side, So. Chicago, Ill. Chicago, Ill.

## ALZEN, CARL A.

Charter Member, Active Member, 1908. Fire Protection Engineer, "Royal" of Liverpool, Chicago, Ill.

Res., 5240 Kenmore Ave., Chicago, Ill.

#### ANDERSON, CARL A.

Active Member, 1915.

President Reliance Elevator Company. Res., 1503 Lake Ave., Wilmette, Ill.

#### ANDERSON, C. B.

Active Member, 1913. With Western Electric Co., Hawthorne, Ill. Res., 6147 Champlain Ave., Chicago, Ill.

# ANDERSON, CARL F.

Active Member, 1913.

Manufacturer.

Res., 1650 S. Millard Ave., Chicago, Ill.

#### ANDERSON, JOHN C. A.

Active Member, 1914.

Treasurer, Reliance Elevator Company, Chicago, Ill.

Res., 212 West Austin Ave., Chicago, Ill.

# ANDERSON, JOHN F.

Corresponding Member, 1912.

U. S. Vice Consul, Copenhagen, Denmark. Res., Båstad. Sweden.

## ANDERSON, JOHN M.

Active Member, 1916.

Estimator, Bulley K. Andrews, General Contractors.

Res., 6327 Throop St., Chicago, Ill.

# ANDERSON, H. A.

Active Member, 1908.

With Central Iron Works, Chicago, Ill. Res., 342 W. Chicago Ave., Chicago, Ill.

## ANDERSON, WALTER B.

Active Member, (1917.

Designing Engineer, Roberts & Schafer Co., McCormick Bldg., Chicago, Ill.

Res., 6119 Kenwood Ave., Chicago, Ill.

## ASTROM, CARL P.

Corresponding Member, 1915.

Chief Engineer, M. H. Treadwell Company, New York.

Res., 14 Chestnut St., East Orange, N. J.

#### AXEL, SWEN

Corresponding Member, 1912.

Res., Kungsholmsgatan 30, Stockholm, Sweden.

# AXELL, C. G.

Active Member, 1909.

Vice President, 1911. Secretary, 1914.

Engineer of Elec. Design, Commonwealth Edison Co., Chicago, Ill.

Res., 3732 N. Racine Ave., Chicago, Ill.

## BALCHER, MARTEN

Charter Member, Active Member, 1908. With Blomfeldt & Rapp Co., Chicago, Ill. Res., 1422 Belle Plaine Ave., Chicago, Ill.

### BERG, ERNST J., Sc. D.

Life Member, 1910.

President, 1911.

Professor of Electrical Engineering, Union College, Schenectady, N. Y.

#### BERG, GUSTAV

Corresponding Member, 1909. General Manager "Lux" Company, Stockholm, Sweden.

#### BERGEN, THEODORE A.

Corresponding Member, 1913.

Chief Electrical Engineer,

A.-B. Industribyrån, Västra Trädgårdsgatan 7, Stockholm, Sweden.

#### BERGENDORF, G.

Corresponding Member, 1912.

Superintendent, Rock Island Plow Company, Rock Island, Ill.

Res., 850 22nd St., Rock Island, Ill.

# BERGGREN, A. E.

Corresponding Member, 1910. Instructor in Mech. Engineering, Wisconsin University, Madison, Wis. Res., 221 Engineering Bldg., Madison, Wis.

## BERGLAND, ERIC, MAJOR

Corresponding Member, 1909.

Major Corps of Engineers, U. S. A., Retired.

P. O. Box 30, Baltimore, Md.

## BERGQUIST, CARL

Active Member, 1909. With F. W. Tunnell & Co., 15 N. Fifth Ave., Philadelphia, Pa.

## BERGQUIST, J. G.

Charter Member, Life Member, 1908. Consulting Engineer. Res., Glen Head, Long Island, N. Y.

#### BILLNER, K. P.

Corresponding Engineer. Billesholms Grufva, Sweden.

# BIRCH, CHARLES H.

Active Member, 1912. With H. W. Caldwell & Son, Chicago, Ill. Res., 3253 Southport Ave., Chicago, Ill.

## BIRKLAND, EMIL E.

Active Member, 1909. With Crane Company, Chicago, Ill. Res., 1417 N. California Ave., Chicago, Ill.

# BJURSTROM, K. GUSTAF A.

Charter Member, Active Member, 1908. Treasurer, 1911. Asst. Chief Loco. Draftsman, C. & N.-W. Ry.

Co., Chicago, Ill.

Res., 1625 Ainslie St., Chicago, Ill.

### BJÖRKSTEDT, WILLIAM

Corresponding Member, 1910. Works Manager, Stavanger Elektro-Staalverk, Norway,

## BJÖRNBOM. T.

Corresponding Member, 1912. With Luth & Rosen's El. A.-B., Stockholm. Res., Högbergsgatan 54, Stockholm, Sweden.

## BJÖRNCRANTZ, FRANZ

Associate Member, 1916 Superintendent (Printing). Res., 1445 Farragut Ave., Chicago, Ill.

#### BLOMFELDT, P. AXEL

Active Member, 1912. Blomfeldt & Rapp Co., Manufacturers, Chicago.

Res., 6523 Greenview Ave., Chicago, Ill.

#### BOLIN. C. A.

Active Member, 1908.

Treasurer, 1913-1914. Vice President, 1916. Eng. Dept., Western Electric Company, Hawthorne. Ill.

Res., 3134 Wilson Ave., Chicago, Ill.

## BOMB, KARL

Corresponding Member, 1910. With H. Koppers Co., Pittsburgh, Pa. Res., 6109 Alder St., Pittsburgh, Pa.

#### BORG, FRED G.

Active Member, 1910. Engineer of Shops, Chicago Surface Lines. Res., 6943 Eberhardt Ave., Chicago, Ill.

#### BORGMAN, OSCAR J.

Active Member, 1916.

Architectural Draftsman, Sargent & Lundy. Engineers.

Res., 4017 N. Paulina St., Chicago, Ill.

## BROBERG, H. A.

Active Member, 1910. Address unknown.

## BRORSON, CARL

Corresponding Member, 1917.

Designing Engineer and Draftsman for the Standard Tractor Co., Stillwater, Minn.

Address, Stillwater, Minn.

## BRUNNER, JOHN

Charter Member, Active Member, 1908. President, 1916.

Asst. Insp. Eng'r, Illinois Steel Co., Chicago. Res., 627 Dartmouth Place, Evanston, Ill.

# BRÖMS, C. O. J.

Corresponding Member, 1913. Ingenior, Sandvikens Jernverks A.-B., Sandviken, Sweden.

## BURKLUND, OSCAR

Active Member, 1915. General Contractor. Res., 929 N. Menard Ave., Chicago, Ill.

#### CARLSON, ANDROV

Active Member, 1910. Manufacturer. Res., 6030 Sheridan Road, Chicago, Ill.

#### CARLSON, CARL THOMAS

Corresponding Member, 1912. With Springfield Boiler Works, Springfield, Ill. Res., 843 S. 5th St., Springfield, Ill.

# CARLSON, CHARLES A.

Active Member, 1916. Forging and Structural Steel. Res., 3300 Palmer St., Chicago, Ill.

#### CARSON, C. E.

Active Member, 1909. Vice President, 1914. General Contractor. Res., 928 Argyle Ave., Chicago.

# CEDERBLOM, RAGNAR

Active Member, 1912.

With Chas. G. Atkins, Consulting Engineers, Res., 2707 East 78th St., Chicago, Ill.

## CEDERBORG, G. V.

Corresponding Member, 1910. A.-B. Svenska Sockerfabriken, Arlöf, Sweden.

# CEDEROTH, ALEF

Active Member, 1913.

Asst. Div. Engineer, Great Lakes Dredge & Dock Co., Chicago, Ill. Res., 4058 Broadway, Chicago, Ill.

## COLGREN, A. F.

Charter Member, Active Member, 1908. Manufacturer. Res., 233 W. 61st St., Chicago, Ill.

#### CRONQUIST. G. W:SON

Corresponding Member, 1913. Asst. Director, A.-B. Raméns Patenter, Helsingborg, Sweden.

# DAHLBERG, GUSTAVE

Active Member, 1915. With Western Electric Co. Res., 5635 Waveland Ave., Chicago, Ill.

## DAHLIN ERNST

Corresponding Member, 1910. Chemist, Tidafors Sulfitfabrik, Sandhem. Res., Tidafors, Sandhem, Sweden.

# DEDERING, HELMER

Active Member, 1912. With Mark Mfg. Co., Indiana Harbor, Ind. Res., 6426 Vernon Ave., Chicago, Ill.

## DEHLIN, MARTIN

Active Member, 1910. With Western Steel Car & Foundry Co., Hegewisch, Ill. Res., 13328 Burley Ave., Hegewisch, Ill.

## DILLNER, OLOF I.

Corresponding Member, 1915. Chief Draftsman, Interstate Contr. & Supply Co., St. Louis, Mo. Res., 4570 Oakland Ave., St. Louis, Mo.

#### DEVIN, KLAS LUDVIG

Corresponding Member, 1910. With American Bridge Co., Pittsburgh, Pa. P. O. Box 1556, Pittsburgh, Pa.

#### DUNER, JOHN C.

Active Member, 1910. Manufacturer, 101 S. Clinton St., Chicago, Ill. Res., Wheaton, Ill.

## EDLUND, K. EDW.

Corresponding Member, 1912. With Oxelösunds Jernverk, Sweden. Res., Oxelösund, Sweden.

# EDQUIST, P. A.

Corresponding Member, 1916. Consulting Engineer. Vice Consul for Sweden. Res., 802 N. 42nd St., Omaha, Neb.

## EHNBORN, CLEMENS

Active Member, 1912. Manufacturer. Res., 4450 Montana St., Chicago, Ill.

## EICHHORN, M. J.

Charter Member, Active Member, 1908. Mechanical Engineer, with Sargent & Lundy, Engineers, Res., 502 W. 60th Place, Chicago, Ill.

# EKBLOM, F. W.

Active Member, 1915. Mechanical Draftsman, North-Western Ry. Co., Chicago. Res., 1510 N. Spaulding Ave., Chicago, Ill.

#### EKLUND, JOEL

Active Member, 1917. Supervisory Engineer, Joseph Schneible. Res., 5105 N. Ashland Ave., Chicago, Ill.

#### EKLUND, SVEN

Active Member, 1913. With Western Electric Co., Hawthorne, Ill. Res., 5030 Warwick Ave., Chicago, Ill.

## ENGWALL, CHARLES F.

Charter Member, Active Member, 1908. Inspecting Engineer. Res., 3139 Eastwood Ave., Chicago, Ill.

# ERIKSON, CARL E.

Active Member, 1910. With Gillette Motor Co. Res.', Mishawaka, Ind.

## ERIKSON, CLIFFORD E. J.

Corresponding Member, 1910. Res., 514 Lincoln Way, East Mishawaka, Ind.

## ERICKSON, EMIL

Active Member, 1912. President Erickson Mach'y Co., Chicago, Ill. Res., 7809 South Shore Drive, Chicago, Ill.

## ERICSON, E. J.

Charter Member, Corresp'g Member, 1908. Chief Chemist, Edgar Zinc Co., St. Louis, Mo. Res., 5045 Cullon Ave., Chicago, Ill.

#### ERICSSON, HENRY

Charter Member, Life Member, 1908.
President, 1913.
General Contractor, City Hall Square Bldg.,
Chicago, Ill.
Res., 534 Surf St., Chicago, Ill.

## ERICSON, IVAR

Active Member, 1909.

With Chicago Architectural Bronze Co., Chicago, Ill.

Res., 6959 Ozaman Ave., Chicago, Ill.

# ERICSON, JOHN, R. V. O.

Active Member, 1910.

President, 1912 and 1914.

City Engineer, City Hall, Chicago, Ill.

Res., 848 Lakeside Place, Chicago, Ill.

## ERICSSON, JOHN E.

Charter Member, Active Member, 1908. Vice President, 1915.

General Contractor.

Lanquist & Illsley Co., Chicago, Ill.

Res., 4530 Beacon St., Chicago, Ill.

# ERICSSON, WALTER H.

Active Member, 1909.

With Henry Ericsson Company, Chicago, Ill. 1720 City Hall Suare Bldg., Chicago, Ill.

#### ESBJÖRNSON, ÅKE

Corresponding Member, 1910.

Patent A.-B. Jungners Kali-Cement. Norrköping, Sweden.

## FERNGREN, AUGUST

Active Member, 1910.

Manager, A. F. Cement Construction Co., Chicago.

Res., 3052 Davlin Court, Chicago, Ill.

# FLODENBERG, A. T.

Charter Member, Corresp'g Member, 1908. With A., T. & St. F. R. R., Topeka, Kans. Res., 404 German Ave., Topeka, Kans.

## FOGEL, J. P.

Active Member, 1913.

Mechanical Engineer,

Western Electric Company, Hawthorne, Ill.

Res., 4210 N. Sawyer Ave., Chicago, Ill.

# FOGEL, R. W.

Active Member, 1909. Architect, with E. C. & R. M. Shankland, Chicago.

Res., 1839 Warner Ave., Chicago, Ill.

## FOLKS, OSCAR

Corresponding Member, 1913. Mechanical Engineer, Helsingfors Water Pipe & Supply Company, Helsingfors, Finland.

#### FREDRICKSON, GOTTFRIED

Corresponding Member, 1910. Fagersta Bruks Aktiebolag, Fagersta, Sweden.

## FRIBERG, EMIL

Active Member, 1912. Superintendent, Lanquist & Illsley Co., Chicago, Ill. Res., 4619 Dover St., Chicago, Ill.

## FRÖLEN, FREDRIK

Corresponding Member, 1914. With Nickols & Todsen Company, Stockholm, Sweden. Res., Odensgatan 17, Stockholm, Sweden.

## GABRIELSON, ERIK V.

Corresponding Member, 1910. Engineer, Allmänna Sv. Elektriska A.-B., Vesterås, Sweden. Res., Floragatan 17, Vesterås, Sweden.

## GULLBORG, JOHN S.

Active Member, 1909.
Treasurer, 1917.
President, Alemite Metals Co., Chicago, Ill.
Res., 4631 Beacon St., Chicago, Ill.

# GUSTAFSON, E. A.

Active Member, 1915. With Stewart-Warner Speedometer Corporation, Chicago, Ill. Res., 1836 S. Sawyer Ave., Chicago, Ill.

#### GUSTAFSON, FRANK G.

Active Member, 1909. Builder and Real Estate Expert. Res., 5704 Kenmore Ave., Chicago, Ill.

# GUSTAFSON, G. EDWARD

Active Member, 1912.
Civil Engineer,
E. C. & R. M. Shankland, Chicago, Ill.
Res., 1213 Eddy St., Chicago, Ill.

# GÖRANSSON, S. G.

Active Member, 1912. With Wahl Adding Machine Co., Chicago. Res., 643 Melrose Ave., Chicago, Ill.

## HAEGSTEDT, A. L.

Active Member, 1914. General Contractor and Builder. Res., 727 Bittersweet Place, Chicago, Ill.

## HALL, ERIC E.

Active Member, 1909.
County Architect.
11 So. La Salle St., Chicago, Ill.
Res., 1214 Cornelia Ave., Chicago, Ill.

# HAMRÉN, ERIK O.

Corresponding Member, 1916. With Allis Chalmers Manufacturing Co., West Allis, Wis. Res., 536 72nd Ave., West Allis, Wis.

#### HANSON, VICTOR

Active Member, 1912. Gen'l Foreman, Crane Company, Chicago, Ill. Res., 540 Harvey Ave., Oak Park, Ill.

## HASSELQUIST, HUGO S.

Active Member, 1913. Superintendent, Wahl Adding Machine Co., Chicago, Ill. Res., 4109 Greenview Ave., Chicago, Ill.

# HAWKINS, KARL

Active Member, 1916. Superintendent and Designer, Stierlin Machine & Die Works, Chicago, Ill. Res., 1632 Altgeld St., Chicago, Ill.

# HAWKINSON, AXEL

Associate Member, 1915. Vice Consul for Sweden. Res., 3105 Jefferson St., Kansas City, Mo.

## HEDELIN, CHARLES W.

Charter Member, Active Member, 1908. With Illinois Steel Company, North Works. Res., 4822 N. Ashland Ave., Chicago, Ill.

# HEDMAN, C. M.

Active Member, 1910. President, Hedman Mfg. Co., Chicago, Ill. Res., 720 Irving Park Blvd., Kellshore Hotel, Chicago, Ill.

## HELLMAN, FREDRICK

Corresponding Member, 1914. Res., 9-11 Engelbrektsgatan, Stockholm, Sweden.

## HENREKSON, JOHN W.

Corresponding Member, 1913. General Manager, Ahlen & Holm, Insjön, Sweden.

## HILLBERG, A. G.

Corresponding Member, 1912. Hydraulic Engineer, Park Row Building, New York, N. Y.

# HODELL, ERNST

Corresponding Member, 1916. With Bergslagernas Järnvägar. Address, Åmål, Sweden.

## HODGSON, JOHN F.

Active Member, 1915. Elec. Designer, Sargent & Lundy, Engineers, Chicago, Ill. Res., 1301 N. Dearborn Ave., Chicago, Ill.

# HOGLUND, GUST, E.

Corresponding Member, 1910. With Fort Wayne Electric Company. Res., 909 Parkview Ave., Fort Wayne, Ind.

#### HOLM, ERIC E.

Corresponding Member, 1912. Mining Engineer, Loussavaara-Kirunavaara Aktiebolag. Res., Malmberget, Sweden.

#### HOLMEN, A. R., R. V. O.

Corresponding Member, 1909.
Chief Draftsman,
Pennsylvania Lines, Columbus, O.
Res., 73 Cleveland Ave., Columbus, Ohio.

# HOLMER, F. N.

Active Member, 1916.
With Illinois Steel Co., South Works,
Chicago, Ill.
Res., 7645 Coles Ave., Chicago, Ill.

## HOLMES, SVEN

Charter Member, Active Member, 1908. Engineer, McCord & Co., West Pullman, Ill. Res., 2234 East 70th St., Chicago, Ill.

## HULTAN, K. A.

Active Member, 1916. With Illinois Steel Co., South Works, Chicago, III. Res., 7645 Coles Ave., Chicago, III.

# HVITFELDT, ROBERT

Associate Member, 1909. Designer and Engraver, 508 S. Dearborn St. Res., 1329 Carmen Ave., Chicago, III.

## HYTTENBERG, EUGEN

Corresponding Member, 1914. Lieutenant. Address, Norrviken, Sweden.

## IGGBERG, F. W.

Active Member, 1909. Vice President, 1913. President, 1917. Electrical Engineer, Western Electric Co., Hawthorne, Ill.

Res., 3937 Jackson Blvd., Chicago, Ill.

# JERNBERG, CARL

Active Member, 1910. Superintendent, Standard Forgings Co., Indiana Harbor, Ind. Res., 6550 Harvard Ave., Chicago, Ill.

## JERNSTROM, JOSEPH AXEL

Active Member, 1917. Chemist, with American Smelting and Refining Co., Omaha, Neb. Res., 2313 Douglas Ave., Omaha, Neb.

#### JOHANSON, THURE A.

Active Member, 1909. Superintendent, Cable Piano Company. Res., St. Charles, Ill.

#### JOHNSON, ARTHUR A. V.

Corresponding Member, 1913. Res., 247 Sheridan St. Zanesville, Ohio.

#### JOHNSON, BROR

Corresponding Member, 1915. With Chile Exploration Company, Chuquicamata, Chile.

# JOHNSON, E. S.

Active Member, 1916. Tool Designer, Western Electric Company, Hawthorne, Ill. Res., 2846 Lyndale St., Chicago, Ill.

# JONSSON, SIXTEN

Active Member, 1914. Estimator and Engineer, Lanquist & Illsley Company, Chicago, Ill Res., 2330 115th St., Chicago, Ill.

## KARLSTEEN, AXEL

Active Member, 1912. General Contractor. Res., 3019 Edgewood Ave., Chicago, Ill.

## KJELLSTEDT, L. HARALD

Corresponding Member, 1910. Principal, International Correspondence School, Scranton, Pa. Res., 1026 Woodlawn Ave., Scranton, Pa.

## KROPP, C. A.

Active Member, 1914. President, Kropp Forge Co., Chicago, Ill. Res., 2512 W. 21st St., Chicago, Ill.

#### KULLBERGER, ERIC

Active Member, 1909. With South Side Auto Exchange, 6047 S. Halsted St., Chicago, Ill.

#### KUYLENSTJERNA, ADOLF

Corresponding Member, 1909. Mech. and Elec. Engineer, The American Railways Company, 917 Witherspoon Building, Philadelphia, Pa.

## LAGERHOLM, EVAR

Active Member, 1914. Sales Engineer Illinois Tool Works, Chicago, Ill. Res., 1417 Farragut St., Chicago, Ill.

## LANQUIST, ANDREW

Active Member, 1910. Builder, Lanquist & Illsley Co., Chicago, ill. Res., 4630 Beacon St., Chicago, Ill.

#### LARSON, AXEL F.

Active Member, 1909.
Superintendent, The Marquette Piano Co., Chicago, Ill.
Res., 7925 S. Peoria St., Chicago, Ill.

## LARSON, E. G.

Active Member, 1913. Superintendent of Construction, A. R. Clark & Co., Chicago, Ill. Res., 6343 Elizabeth St., Chicago, Ill.

#### LARSON, P. L.

Active Member, 1912. President and Treasurer, Central Iron Works, Chicago, Ill. Res., 3528 W. Fulton St., Chicago, Ill.

## LEFFLER, HAKON M.

Corresponding Member, 1912. Res., Ljusne, Sweden.

## LETH, ERIC GUNNAR

Corresponding Member, 1917. Chemist, with Eli Lilly & Co., Pharmaceutical Chemists, Indianapolis, Ind. Res., 820 N. East St., Indianapolis, Ind.

## LEVEDAHL, AXEL

Corresponding Member, 1913. Consulting Engineer, Aurora Automatic Machine Co., Aurora, Ill. Res., 33 Hickory Ave., Aurora, Ill.

# LEVIEN, RAGNAR J. O.

Active Member; 1914. With Indiana Steel Co., Gas Eng. Dept., Gary, Ind.

## LEVIN, A. M.

Corresponding Member, Professor, Kungl. Tekniska Högskolan, Stockholm, Sweden.

# LEVIN, ASTOLF P. E.

Corresponding Member, 1909. Advertising Manager, The Sharples Separator Co., West Chester, Pa. Res., 419 N. Walnut St., West Chester, Pa.

#### LEVIN, N. D.

Charter Member, Corresp'g Member, 1908. Chief Ingineer,

The Jeffrey Mfg. Co., Columbus, Ohio. Res., 1814 N. High St., Columbus, Ohio.

#### LIDSEEN, GUSTAVE

Active Member, 1912.

Manufacturer.

Res., 2942 Edgewood Ave., Chicago, Ill.

# LINDBERG, EMIL

Active Member, 1914.

With Swedish Iron & Steel Corporation,

New York and Chicago.

Res., 3852 N. Clark St., Chicago, Ill.

#### LINDBERG, TORVALD

Corresponding Member, 1910. Address, Box 445, Marshfield, Oregon.

## LINDEBLAD, EINAR

Active Member, 1916. Swedish Iron & Steel Corporation, 217 N. Desplaines St., Chicago, Ill.

## LINDGREN, W. L.

Active Member, 1915.

Superintendent, The Standard Spiral Pipe Works, Chicago, Ill.

Res., 841 N. Hamlin Ave., Chicago, Ill.

#### LINDQUIST, O. F.

Corresponding Member, 1912.

General Contractor.

Res., 1244 39th St., Rock Island, Ill.

## LINDWALL, K. G.

Active Member, 1912.

With State Bank of Chicago.

Res., 7031 Ridge Ave., Chicago, Ill.

# LJUNGBECK, TAGE G.

Corresponding Member, 1916. Mechanical Engineer. Res., Kungsgatan 30, Malmö, Sweden.

## LUND, A. G.

Charter Member, Active Member, 1908. Architect, 810 W. 63rd St., Chicago, III. Res., Palos Park, III.

# LUNDBERG, SVEN, LIEUT.

Corresponding Member, 1914.

Asst. Superintendent,

Nobel Bros., Baku, Russia.

Res., Barnhusgatan 13, Stockholm, Sweden.

# LUNDGREN, A. A:SON, LIEUT.

Corresponding Member, 1912. Address, Elfkarleö, Sweden.

#### LUNDGREN, ADOLPH

Active Member, 1912. General Contractor. Res., 6828 Normal Blvd., Chicago, Ill.

## LUNDGREN, ERIC R.

Active Member, 1908. Chief Draftsman, Pettibone, Milliken & Co., Chicago, Ill. Res., 524 Clarence Ave., Oak Park, Ill.

# LUNDQUIST, HJALMAR

Associate Member, 1908.
Representative for the
Swedish Old People's Home Association.
Res., 1421 Summerdale Ave., Chicago, Ill.

## LUNDQUIST, H. R.

Active Member, 1915.
Designer, Western Electric Company,
Hawthorne, Ill.
Res., 911 School St., Chicago, Ill.

### LöFWEBERG, JOHAN

Active Member, 1917. Draftsman, American Bridge Company. Res., 5319 24th Place, Cicero, Ill.

## MAGNUSON, T. J.

Active Member, 1914. Superintendent, H. E. Pridmore Molding Machine Co., Chicago. Res., 1655 Clifton Park Ave., Chicago, Ill.

## MALLING, MALTE

Active Member, 1912. With Western Electric Co., Hawthorne, Ill. Res., 2603 N. Hamlin Ave., Chicago, Ill.

## MALMGREN, VICTOR

Corresponding Member, 1912. Address, P. O. Box 5, Sta. B, Cleveland. O.

# MALMSTEN, J. O.

Active Member, 1916. Mechanical Designer, Western Electric Co., Hawthorne, Ill. Res., 1127 Oak Grove Ave., Chicago, Ill.

## MALMSTROM, ALEX. G.

Corresponding Member, 1909. Chief Draftsman, National Cash Register Co., Dayton, Ohio. Res., 143 Indiana Ave., Dayton, Ohio.

## MATTSON, ERICK

Active Member, 1917.

Tool Designer, with Miehle's Printing Press Manufacturing Co., Chicago.

Res., 3526 N. Crawford Ave., Chicago, Ill.

## MAYER HJALMAR

Active Member, 1909. With R. E. Schmidt, Garden & Martin, Architects, Chicago, Ill. Res., 5344 Winthrop Ave., Chicago, Ill.

## MELLQUIST, AXEL

Corresponding Member, 1912. With Stephens Adamson Manufacturing Co., Aurora, Ill. Res., 131 Galena Blvd., Aurora, Ill.

#### MILDE, IVAR

Corresponding Member, 1910. Kungl. Vattenfallsstyrelsen, Klara 23, Karlstad, Sweden.

# MODINE, A. B.

Corresponding Member, 1910. Manufacturer. Perfex Radiator Company, Racine, Wis.

# MONSON, AXEL A.

Active Member, 1915.

Manager, Universal Stamping & Mfg. Co., Chicago, Ill.

Res., 4706 N. St. Louis Ave., Chicago, Ill.

#### MONSEN, GUNNAR S.

Corresponding Member, 1910. General Contractor. Res., örebro, Sweden.

## MOOHL, J. G.

Corresponding Member, 1912. Res., 18403 Euclid Ave., Cleveland, Ohio.

## MOSSBERG, FRANK

Corresponding Member, 1914. President, Frank Mossberg Company, Attleboro, Mass. Res., Attleboro, Mass.

# NANNFELDT, GEORGE

Active Member, 1910. With Link Belt Company, Chicago, Ill. Res., 7926 S. May St., Chicago, Ill.

# NANNFELDT, JAKOB

Corresponding Member, 1913.

With Allis Chalmers Manufacturing Co., West Allis, Wis.

Res., 555 72nd Ave., West Allis, Wis.

## NASSEN, HELGE

Active Member, 1914.

With Chicago & Northwestern Railway Co. Res., 6215 S. Maplewood Ave., Chicago, Ill.

#### NAUCKHOFF, B.

Corresponding Member, 1913. With Zenite Metal Company, Indianapolis, Ind.

# NELSON, OSCAR

Active Member, 1914.

With Crane Co., Machine Designing Dept. Res., 3335 Sheffield Ave., Chicago, Ill.

### NICHOLSON, VICTOR

Active Member, 1913.

Asst. Eng. Chemist,

Dept. of Public Works, City of Chicago.

Res., 7621 Lowe Ave., Chicago, Ill.

# NORBERG, HARALD

Corresponding Member, 1914.
Res., 6820 Bayliss Ave., Cleveland, Ohio.

# NORDER, G.

Corresponding Member, 1909.

Res., Holmgatan 13, Falun, Sweden.

# NORELL, MARTIN

Charter Member, Active Member, 1908. Chief Draftsman, Chicago Steel Car Co., Harvey, Ill. Res., 8121 Loomis St., Chicago, Ill.

## NORLIN, FRED

Charter Member, Active Member, 1908. Civil Engineer and Surveyor, 30 N. La Salle St., Chicago. Res., 2744 Mildred Ave., Chicago, 111.

## NORLING, REINHOLD A.

Corresponding Member, 1913. With Aurora Automatic Machine Company, Aurora, Ill. Res., 180 Wilder St., Aurora, Ill.

## NYBERG, HENRY

Charter Member, Life Member, 1908. President, 1908-1908. Automobile Manufacturer. Res., Kitchener, Ontario, Canada.

## NYDEN, JOHN A.

Active Member, 1913. Architect, 64 W. Randolph St., Chicago, III. Res., 5511 Wayne Ave., Chicago, III.

## NYQUIST, CARL JOHAN

Active Member, 1917. Manager, Torchweld Equipment Co. Res., 11 W. Goethe St., Chicago, Ill.

# OBERG, STEN V.

Corresponding Member, 1913. With Owosso Sugar Company, Owosso, Mich.

## OLSON, CARL E.

Active Member, 1911. Manufacturer. Res., 2216 W. Monroe St., Chicago, Ill.

#### OLSON, CARL G.

Active Member, 1917. Chief Engineer, Illinois Tool Works. Res., 619 Wrightwood Ave., Chicago, Ill.

#### OLSON. ERNEST M.

Active Member, 1913. With Western Electric Co., Hawthorne, Ill. Res., 4214 N. Ashland Ave., Chicago, Ill.

## OLSON, JNO. O.

Corresponding Member, 1910. Chief Engineer, with Hubbard Ice Co., Cedar Rapids, Iowa. Res., 1206 4th Ave. E., Cedar Rapids, Iowa.

## OLSON, KARL E.

Active Member, 1913. Chemist, Goldschmidt Detinning Company, East Chicago, Ind. Res., 1105 Beacon St., East Chicago, Ind.

# OLSON, KLAS O.

Active Member, 1909.
Building Superintendent,
Leonard Construction Company.
Res., 1969 Winona Ave., Chicago, Ill.

## ONGMAN, CLARENCE S.

Active Member, 1912. Vice President, 1917. Foreman, Water Pipe Ext'n, City Hall, Chgo. Res., 1432 Balmoral Ave., Chicago, Ill.

#### OSTERGREN, ROBERT C.

Active Member, 1909. Vice President, 1912. Architect, Hall & Ostergren. Address, 11 So. La Salle St., Chicago, Ill.

## OSTLIND, BENJAMIN

Corresponding Member, 1914. Consulting Engineer and Architect. Res., Irving Block 206, Marchfield, Oregon.

#### ÖSTLIN, OLOF

Corresponding Member, 1909. Mechanical Engineer, Bolinders Mekaniska Verkstäder, Stockholm, Sweden.

# PALMQUIST, THURE

Active Member, 1912. With J. H. Heuser, Monadnock Block, Chicago, Ill.

Res., 2701 Lincoln Ave., Chicago, Ill.

## PARKE, PETER

Active Member, 1910. Chief Engineer, Pullman Co., Chicago, Ill. Res., 5464 Everett Ave., Chicago, Ill.

#### PEARSON, HAROLD

Active Member, 1912. Superintendent, Torchweld Equipment Co. Res., 7244 Dobson Ave., Chicago.

## PETERSON, C. H.

Corresponding Member, 1914. Southwestern Representative, Baldwin Locomotive Works, 1610 Wright Building, St. Louis, Mo.

# PETERSON, C. S.

Active Member, 1912. Director, Peterson Linotyping Company, Chicago, Ill. Res., 757 Buena Ave., Chicago, Ill.

# PETERSON, FRANK A.

Active Member, 1912. Surveyor.

Address, R. 507, 164 W. Washington St., Chicago, Ill.

# PETTERSON, HUGO

Corresponding Member, 1912. Construction Engineer, Mt. Vernon Bridge, Co., Ohio. Res., 506 E. Gambier St., Mt. Vernon, Ohio.

#### PETTERSON, HJALMAR

Corresponding Member, 1909. With Finland State Railway, Helsingfors, Finland. Res., Borgågatan 21, Helsingfors, Finland.

## PIHL, KARL

Active Member, 1914. With A. & A. Mfg. Co., Chicago, Ill. Res., 734 Cornelia Ave., Chicago, Ill.

### POITZEL, RUDOLPH

Corresponding Member, 1916. Draftsman. Address, Leetsdale, Pa.

## RAMSTEN, K. E.

Corresponding Member, 1915. With Westinghouse Mfg. Co. Res., 849 Retekka Ave., Wilkingsburg, Pa.

## RANDERS, F.

Active Member, 1912. With Sargent & Lundy, Engineers.. Res., 846 Roscoe St., Chicago, Ill.

### RANG, C. E.

Artist. Res., 35 S. Dearborn St., Chicago, Ill.

Associate Member, 1913.

# RAPP, AXEL G. J.

Active Member, 1917.
Superintendent of Construction,
Link-Belt Company.
Res., 1255 Rosedale Ave., Chicago, Ill.

## RAPP, OSCAR

Active Member, 1916.
Manufacturer, Blomfeldt & Rapp Co.,
Chicago, Ill.
Res., 1443 Berwyn Ave., Chicago, Ill.

# RENNERFELT, IVAR

Corresponding Member, 1909. Chief Engineer, A.-B. Elektriska Ugnar, Stockholm, Sweden. Res., Vanadisvägen 24, Stockholm, Sweden.

# RISSLER, ALBIN

Charter Member, Life Member, 1908. President, 1915. Vice President, 1908-09-10. Mechanical Engineer. Chicago Ry. Equipment Co., Chicago, Ill. Res., 7225 Emerald Ave., Chicago, Ill.

# ROBERTSON, GUSTAF E.

Active Member.
Address unknown.

## ROOS, ERIC

Active Member, 1909. Internat'l Harv. Co., McCormick's Works, Chicago, III. Res., 219 Wisconsin St., Chicago, III.

# ROOS, GUNNAR

Corresponding Member, 1910.

Sales Engineer, Atlas Mekaniska Verkstäder, Stockholm, Sweden.

Res., Heimdalsgatan 13, Stockholm, Sweden.

#### RYDSTROM, UNO

Corresponding Member, 1913.

With A.-B. Diesel Motorer,

Stockholm, Sweden.

Res., Hornsgatan 26-1, Stockholm, Sweden.

#### SAFSTROM, ERLAND

Active Member, 1914.

Mechanical Designer,

The B. F. Cummings Mfg. Co., Chicago, Ill. Res., 5120 Glenwood Ave., Chicago, Ill.

#### SAHLIN, JOHN

Active Member, 1912.

With Western Electric Co., Hawthorne, Ill., Res., 910 S. Sixth Ave., Maywood, Ill.

## SANDEGREN, ANDREW

Active Member, 1910.

Architect.

2064 Conway Building, Chicago, Ill.

## SANDELL, H. K.

Active Member, 1910.

With Mills Novelty Company, Chicago, Ill Res., 1646 Farragut Ave., Chicago, Ill.

#### SÄVE, CARL

Corresponding Member.

Secretary, 1916.

Ahchitect.

Res., Jerome, Idaho.

# SEABERG, FRED

Charter Member, Active Member, 1908.

Treasurer, 1908-1909.

Designer, Illinois Steel Co., 208 N. La Sale St.

Res., 5210 Glenwood Ave., Chicago, Ill.

#### SCHOTT, JOHN H.

Active Member, 1912.

Architect.

Res., 2051 Montrose Ave., Chicago, Ill.

#### SJOBRING, N. P.

Active Member, 1916.

Mechanical Engineer, Acme Supply Co.,

Chicago, Ill.

Res., 1008 N. Laurel Ave., Chicago, Ill.

#### SJOLANDER, AXEL K.

Active Member, 1914.

Engineer, Link Belt Co., Chicago. Ill.

Res., 1525 Winnemac Ave., Chicago, Ill.

#### SJÖSTRÖM, FRANK

Active Member, 1913.

Draftsman.

Res., 5333 N. Clark St., Chicago, Ill.

#### SKJÖLD, GÖSTA

Corresponding Member, 1909. Kungl. Vattenfallsstyrelsen, Stockholm, Sweden. Res., Forshaga, Sweden.

#### SKOGMARK, JOHN

Corresponding Member, 1912. Res., 35 Nassau St. New York City.

#### SODERBECK, ADOLPH R.

Active Member, 1917. Superintendent, Pollak Steel Co. Res., 7823 Saginaw Ave., Chicago, Ill.

#### SODERSTAM, J. T.

Active Member, 1910. Civil Engineer, The Sanitary District of Chicago. Res., 1211 Newport Ave., Chicago, Ill.

#### SONANDER, JOSEF

Corresponding Member, 1912. With International Harvester Corporation, P. O. Box 1131, Moscow, Russia.

#### SPAAK, CHAS, E.

Corresponding Member, 1910. Res., Alingsås, Sweden.

#### SPARR, VICTOR W.

Active Member, 1914. Electrical Designer, Sargent & Lundy, Engineers. Res., 1345 North Shore Ave., Chicago, Ill.

#### STERZEL, S. E.

Corresponding Member, 1912. Res., Kaponiergatan 5. Gothenburg, Sweden.

#### STJERNSTEDT, J. W.

Corresponding Member, 1912. Res.,402 Rialto Bldg., San Francisco, Cal.

#### STRANDBERG, ERIK P.

Active Member, 1912. General Contractor. Res., 5027 Drexel Blvd., Chicago, Ill.

#### STRID, SVEN J.

Charter Member, Active Member, 1908. With Central Locomotive & Car Works, Res., 1643 Buena Vista Avenue, Chicago Heights, III.

#### STROMBORG, CHAS. G.

Active Member, 1914. With Western Electric Co., Hawthorne, Ill. Res., 3939 Wrightwood Ave., Chicago, Ill.

#### STRUKEL, ARVID

Corresponding Member, 1912. Res., Andrégatan 7, Helsingfors, Finland.

# SUNNERGREN, S. P.

Corresponding Member, 1912. Chief Draftsman, Denver & Rio Grande R. R. Co., Denver, Colo. Res., 3447 Pecos St., Denver, Colo.

#### SUNDSTROM, HANS

Corresponding Member, 1909. With Patent A.-B. Jungners Kali-Cement, Norrköping, Sweden.

#### SWANSON, E. J.

Active Members, 1915. Supt. Tool and Die Dept., Stewart-Warner Speedometer Corporation, Chicago. Res., 4614 N. Leavitt St., Chicago, Ill.

#### SWENSON, CARL G.

Corresponding Member, 1915. Vice President, Oakes Pressed Steel Co., Indianapolis, Ind.

Res., 1023 Fletcher Ave., Indianapolis, Ind.

#### SWENSON, GODFREY

Corresponding Member, 1916. President and Treasurer. Swenson Construction Company. Res., 78 Lydia St., Kansas City, Mo.

Corresponding Member, 1910.

#### SYLVAN, CHR.

Editor of Industritidningen "Norden," Stockholm, Sweden.

Res., Tunnelgatan 19A, Stockholm, Sweden.

#### TEVANDER, SWAN N.

Active Member, 1917.

Equipment Dept., American Can Company, 405 N. 4th Ave., Maywood, Ill.

#### TJÄDER, JOHN

Corresponding Member, 1909. Res., Birkagatan 18, Stockholm, Sweden.

#### TORNBERG, KARL

Corresponding Member, 1910. Chemist and Mining Engineer, Oliver Iron Mining Co., Norway, Mich.

#### TÖRJESON, T. A.

Corresponding Member, 1915. Ingeniör, Kungl. Järnverksstyrelsen, Stockholm. Res., Saltsjöbaden, Sweden.

#### VELANDER, V. R.

Corresponding Member, 1910. Asst. Engineer, W. W. Sly Mfg. Co., Cleveland, Ohio. Res., 8410 Denison Ave., Cleveland, Ohio.

#### WÆSSMAN, L. G.

Active Member, 1913. With R. W. Hunt & Co., Engineers. Res., 934 Leland Ave., Chicago, Ill.

# WAHLBERG, NILS ERIK

Active Member, 1917. Chief Engineer, Nash Motor Company, Kenosha, Wis. Res., Kenosha, Wis.

#### WANDELL, IVAR

Corresponding Member, 1914. Res., 611 California Ave., South Bend, Ind.

#### WAXBOM, CHAS. J. E.

Corresponding Member, 1910. Consulting Engineer. Res., 151 E. Park St., Westerville, Ohio.

#### WEDBERG, AXEL G. W.

Corresponding Member, 1916. Estimator. Res., 1319 Park Ave., Kansas City, Mo.

#### WEDBERG, SVEN H.

Corresponding Member, 1913. Res., Döbelsgatan 5-HI, Stockholm, Sweden.

#### WERN, GUST. PERS., R. V. O.

Active Member, 1912. President, Wern Mach. and Eng. Company, 30 Church St., New York, N. Y.

#### WERNER, F. J.

Active Member, 1914. Asst. Master Mechanic, Inland Steel Co., 3725 Drummond St., Indiana Harbor, Ind.

#### WESTBERG, CARL A.

Active Member, 1910. Vice President, East Chicago Company, Indiana Harbor, Ind. Res., 301 W. 67th St., Chicago, Ill.

#### WESTERBERG, HUGO EM.

Active Member, 1910. Res., 1443 E. 53rd St., Chicago, Ill.

#### WESTERLIND, CARL

Active Member, 1909. Treasurer, 1910. Architect, Chicago, Ill. Res., 1201 Ainsley St., Chicago, Ill.

#### WEYDELL, F. O.

Charter Member, Active Member, 1908. Manufacturer, 12 S. Clinton St. Res., 7100 Ridge Blvd., Chicago, Ill.

#### WENNERBERG, AUGUST

Active Member, 1915. Consulting Engineer. Res., 3042 Keating Ave., Chicago, Ill.

#### WEYDELL, JARL MAGNUS

Corresponding Member, 1917. Electrical Engineer. Res., 820 N. East St., Indianapolis, Ind.

# WICKLAND, ALGOT A.

Active Member, 1910. Treaurer, 1912. Res., Muskegon, Mich.

#### WIDELL, M. E.

Active Member, 1914. Chief Draftsman, American Can Company, Maywood, Ill. Res., 900 N. 6th Ave., Maywood, Ill.

#### WILANDER, P.

Active Member, 1909. Mechanical Engineer, Indiana Steel Company, Gary, Ind. Res., 556 Madison St., Gary, Ind.

#### WINGREN, ARTHUR

Corresponding Member, 1912. Address, Finnboda Slip, Stockholm, Sweden.

#### WITTING, ALBIN G.

Active Member, 1916. Asst. Chief Engineer, Indiana Steel Company, Gary, Ind. Res., 610 W. 8th Ave., Gary, Ind.

#### WOHLBERG, J. A.

Charter Member, Active Member, 1908. With Illinois Steel Co., South Chicago, Ill. Res., 6346 S. Wood St., Chicago, Ill.

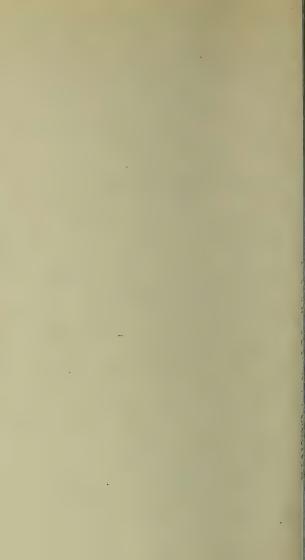


#### MEMBERS

of

The Swedish Engineers' Society of Chicago
June 1, 1917

Honorary Members 2
ife Members 6
Active Members
Corresponding Members—
In U. S. A., Canada and South America. 62
In Europe
ssociate Members 6
Total Members277
241





JOHN ERICSSON

# The Swedish Engineers' Society of Chicago



Membership Book 1919 and Pear Book 1918



# The Swedish Engineers' Society of Chicago

Constitution and By-Laws Membership Book 1919

Year Book 1918

Founded October 10, 1908 Incorporated June 25, 1912



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# Swedish Engineer's Society of Chicago 1919

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1909 HENRY NYBERG

1910 G. A. M. LILJENCRANTZ

1911 DR. ERNST J. BERG

1912 JOHN ERICSON

1913 HENRY ERICSSON

1914 JOHN ERICSON

1915 ALBIN RISSLER

1916 JOHN BRUNNER

1917 F. W. IGGBERG

1918 JOHN E. ERICSSON

# **Honorary Members**

LILJENCRANTZ, G. A. M. Friherre, Kammarjunkare. Charter Member, Honorary Member. Res., Grevgatan 41-2, Sweden.

CARLSON, DR. ANTON JULIUS

Honorary Member. Professor of Physiology, University of Chicago. Res., 5228 Greenwood Ave., Chicago, Ill.

#### **OFFICERS**

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JOHN ERICSON C. G. AXELL AXEL G. J. RAPP

# Constitution and By-Laws

of the

# Swedish Engineers' Society of Chicago

Adopted November 15, 1913

#### ARTICLE I.

#### Name and Object of the Society.

Section 1. The name of the Society shall be "The Swedish Engineers' Society of Chicago."

Sec. 2. The object of this Society shall be to promote knowledge, advancement and co-operation among the technical men of Swedish descent engaged in engineering and industrial operations in Chicago and vicinity.

#### ARTICLE II.

# Membership.

- Sec. 1. The membership shall be divided into five classes: Honorary, Life, Active, Corresponding and Associate.
- Sec. 2. Qualifications. To become a member it is required to be of Swedish descent and to meet the requirements as set forth below.
- Sec. 3. **Honorary Member** shall be a man of prominence in the sciences and industries or who has made himself deserving of the Society's highest regard.
- Sec. 4. **A Life Member** shall be an active or corresponding member of the Society who has paid to the treasury at one time the sum of Fifty (50) Dollars. Such life member shall enjoy all privileges of an active member.
- Sec. 5. **An Active Member** shall be one possessing technical education, from some school or college, or shall be one who, through self-tuition and ability, has worked himself up to a position which requires engineering knowledge.

- Sec. 6. A Corresponding Member shall be residing at a distance of at least forty (40) miles from the city of Chicago. The requirements shall be the same as for an active member. The transfer of an active member to this group shall be made semi-annually.
- Sec. 7. An Associate Member shall be one who cannot qualify as active or corresponding, but who is interested in the Society's activities and who may, by his position in the community, be expected to aid the aims of the Society.

#### ARTICLE III.

# Admissions and Expulsions.

- Sec. 1. Application for membership shall be made on blank, the form of which is determined by the Board of Directors, and shall contain information on several points previously enumerated and a declaration that the applicant will abide with the rules and regulations of the Society. The applicant shall refer to at least two members who are acquainted with applicant and can certify to his desirability as a member.
- Sec. 2. The application must be accompanied by an admission fee of two (2) dollars, and shall be submitted to the Secretary who shall post the name of the candidate and the proposers on the bulletin board for at least one week. The Board of Directors shall then decide whether the applicant is acceptable or not, and shall determine to which class he may be referred. If the applicant is not accepted the admission fee shall be refunded.
- Sec. 3. An honorary member shall be proposed in writing, which shall give the reasons for the proposal and shall be signed by at least ten active members in good standing. He shall be elected only by unanimous vote of the entire Board of Directors, after the name of such candidate has been posted in the regular way. The voting to be done by letter ballot, if necessary.
- Sec. 4. Membership of any person shall date from the date of his election. A rejected applicant may renew his application for membership at any time after the expiration of one year from the date of the ballot rejecting his previous application.
- Sec. 5. A member of the Society may resign his membership by a written communication to the Secretary, who shall present the same to the Board of Directors, who shall accept his resignation, if all his dues have been paid.

Sec. 6. Upon a written request of ten or more active members in good standing, giving cause therefore, a member of the Society may be expelled by the Board of Directors, if there seems to be sufficient reason. The accused member shall first be advised of the charges against him and given an opportunity for defense. If expulsion is found justified, the member shall be notified, but unnecessary publicity should be avoided.

#### ARTICLE IV.

#### Dues.

- Sec. 1. The yearly dues for an active member shall be six (6) dollars. The yearly dues for a corresponding member shall be two (2) dollars if residing in the United States or Canada, and shall be one dollar if residing in other countries. The yearly dues for an associate member residing within forty (40) miles of the city of Chicago shall be four (4) dollars. The yearly dues for an associate member residing forty (40) miles or more from the city of Chicago shall be two (2) dollars. All dues shall be paid in advance. An honorary member shall be exempt from payment of dues.
- Sec. 2. Any person whose dues are more than six months in arrears shall be notified by the Secretary or Treasurer. Should his dues become nine (9) months in arrears, he shall lose his right to vote and to receive the Society's publications, and should his dues become one year in arrears, he shall forfeit his connection with the Society. The Board of Directors, however, may for cause deemed sufficient, extend the time of payment and may relieve any member from paying part or all of his dues when circumstances or the interest of the Society are deemed to justify such action.

#### ARTICLE V.

#### Officers.

- Sec. 1. The officers of the Society shall be as follows:
- Sec. 2. A President, who shall preside at the meetings and perform the duties pertaining to a presiding officer. He shall also be the chairman ex-officio of any committee he may appoint, and whose meetings he may attend.
- Sec. 3. A Vice President, who shall, in the absence of the President, perform all duties required of that officer.

- Sec. 4. A Secretary, who shall attend to the official correspondence of the Society, receive applications for membership, and keep records of the meetings and all official transactions.
- Sec. 5. A Treasurer, who shall, under direction and approval of the Board of Directors, handle all funds of the Society, collect dues and pay bills with check on a Chicago bank and keep books of all such transactions, enabling the Board of Directors at any time to determine the Society's financial standing. The Treasurer shall be bonded in a surety company at the expense of the Society.
- Sec. 6. The Board of Directors shall consist of the officers and five additional active members, elected as stated in Article VI.
- Sec. 7. The President, as chairman of the Board of Directors, shall call meetings of the Board whenever deemed desirable, and shall, together with the Board, establish such rules and regulations for the Society's headquarters, when such exists, as they deem proper, and shall, with the Board, exercise a general supervision over the Society's affairs. At the request of three members of the Board of Directors, an extra meeting shall be called.
- Sec. 8. Standing Committees. The incoming president shall, at the annual meeting, appoint a Committee on Lectures, a House Committee, and a Library Committee. The Committee on Lectures shall consist of three members, whose duties it shall be to arrange for the reading of papers, to lead discussions and otherwise contribute in making the meetings interesting. The House Committee shall consist of three members. This committee shall, under supervision of the Board of Directors, have charge of the Society's property, arrange for quarters and entertainments, etc., but must not incur greater expenses to the Society than given by written authority from the Board of Directors. The Library Committee shall consist of three members. This committee shall have supervision over the Society's library, receive books, magazines and pamphlets, shall list same and shall submit to the Board of Directors estimates of expense desirable to extend and maintain the library.
- Sec. 9. Special Committees and the Appropriation of Money. A proposition to appoint such a committee or to appropriate moneys, shall be presented at a regular meeting of the Society, and, if sustained, the Board of Directors shall take the proposition under advisement and decide whether the object is justified and if the necessary expenses can be met by the Society. In such case, the Board will select a committee and give it instructions as

to the scope of its work and the amount of money available for the purpose. A two-third majority of the Board shall be required to decide, the votes to be east by letter ballot, if necessary.

#### ARTICLE VI.

#### Nomination and Election of Officers.

Sec. 1. The President, Vice President, Secretary, Treasurer, and the Directors shall be elected from the active or life members, in the month of December annually. The officers shall hold office for one year and the directors for two years. Three directors shall be elected in the even years and two in odd years.

The term of each officer shall begin at the close of the annual meeting in January for the year for which he is elected, and shall continue for the period above named or until a successor is duly elected. Should any officer or member of the Board of Directors be unable to serve, such vacancy shall be filled by a life or active member elected by the Board of Directors.

- Sec. 2. There shall be a Nominating Committee composed of six (6) members of the Society, three of which shall be appointed by the Board of Directors and three of which shall be elected annually, when the officers of the Society are elected. This committee shall elect its own chairman. It shall be the duty of this committee to meet in the early part of November of each year and nominate the candidates for officers and directors named in Article V.
- Sec. 3. The three elective members of the nominating committee shall be nominated and elected at the regular December meeting of the Society.
- Sec. 4. The Secretary shall mail, on or before the last Thursday in November of each year, to each member entitled to vote, a ballot containing the names of the nominated candidates for the several offices falling vacant. Under the names of the nominees for each office so printed there shall be provided a space for the use of the voter if he desires to substitute another name. The voter shall enclose said ballot in an envelope in a second envelope marked "Ballot," seal the same, and shall then write his name thereon for identification. The ballot thus prepared and enclosed shall then be mailed or delivered unopened to the Secretary of the Society. The Secretary or Treasurer shall then certify to the competency and signature of all voters. A ballot without the

autographic endorsement of the voter written on the outside of the envelope shall be marked "Defective."

- Sec. 5. All ballots shall be transmitted by the Secretary unopened to the presiding officer of the December meeting. presiding officer shall then declare the election closed and shall appoint three tellers, who shall first destroy all the defective ballots unopened. They shall then open and destroy the endorsed outer envelopes marked "Ballot," and then open the inner envelope and count the votes. The opening of both the outer and inner envelopes as well as the counting of the votes shall be done in open meeting after the election is closed. A ballot which contains more names than there are offices to be filled is hereby made "Defective," and shall be rejected by the tellers. tellers shall certify the results of the voting to the presiding officer, who shall then announce the candidates having the greatest number of votes for their respective offices and declare them elected for the ensuing year. A Tie vote shall be decided through revoting by the voters present.
- Sec. 6. Questions of vital interest to the policies and existence of the Society, shall be submitted in writing at a regular meeting of the Society, and may be, by a majority vote of the members present at such meeting, ordered to be presented for a special ballot to be cast at the next regular December meeting. This ballot shall briefly state the pro and con of the question. "Yes" or "No" should be voted and the ballot enclosed in the same envelope as that containing the official ballot. A two-third majority of the votes cast shall be necessary to carry the question.

#### ARTICLE VII.

# Meetings.

Sec. 1. The regular meeting of the Society shall be held each month at such hour and at such place as may be determined upon. Ten active members in good standing shall constitute a quorum for transaction of ordinary business, with the limitations as stated in Article V, Sec. 9, but questions of vital importance to the Society shall be submitted to letter ballot as described in Article VI, Sec. 6.

Extra meetings may be called by the President on his own initiative or if petitioned by at least ten active members in good standing, who shall sign such petition and state the object of the

meeting. At such extra meeting only such business shall be transacted as stated in the notice to assemble.

Sec. 2. The annual meeting shall be the first regular meeting.

Sec. 3. Members have the privilege to invite friends to the meetings.

Sec. 4. "Roberts' Rules of Order" to govern.

#### ARTICLE VIII.

#### Permanent Funds.

The Commonwealth Edison first mortgage 5% gold bond No. 18095, of one thousand dollars par value and maturing in 1943, shall be held by the Treasurer of the Society, and only the interest thereof shall be used for current expenses. To this permanent fund shall be added the dues for life membership and such sums as the Board of Directors from time to time may decide to add. This permanent fund shall not be drawn upon unless decided in the following manner: The proposition shall be presented in writing at a regular meeting at least three months before the annual election, and may, by a majority vote of the members present at such meeting, be ordered to be presented for a special ballot to be cast at the next regular December meeting. This ballot shall briefly state the pro and con of the proposition. A two-third majority of the votes cast shall be necessary to carry the proposition.

#### ARTICLE IX.

#### Amendments.

Proposed amendments to this constitution must be reduced to writing and signed by at least ten active members in good standing, and shall be submitted to the Board of Directors, who shall have the petition with the names of the petitioners and the proposed amendments printed with the call for a regular meeting of the Society. Should such a meeting by a two-thirds majority vote recommend the amendments as proposed or as amended by the meeting, then the question shall be submitted to a "Special Ballot." Such ballot to contain brief statement of the reasons for the change, pro and con. A two-thirds majority of the votes cast shall be necessary to carry the amendment.

Amendments so adopted shall take effect immediately after the next annual meeting in January.

#### ARTICLE X.

# Dissolution of the Society.

- Sec. 1. Should the number of active members fall below twenty, a proposition may be entertained to disband, but this must be made in writing and addressed to the Board of Directors. An extra meeting shall then be called not earlier than six (6) days after the issuance of such notice, and no other business shall be transacted at such a meeting.
- Sec. 2. Should a meeting so held by a two-thirds majority decide on dissolution, then the question shall be submitted to all voting members by letter ballot, and a two-thirds vote of all active and life members shall be necessary for the dissolution of the Society.
- Sec. 3. A history of the Society shall then be written, and, together with documents, books, correspondence and the gavel, or other relics and valuables the Society may possess, be deposited with the Swedish Historical Society of America, or, if this Society should not exist at the time of the dissolution or not be able to take care of the property turned over, then the Swedish Societies' Old People's Home Association of Cook County, Illinois, should be requested to take into safe-keeping all the belongings until another Swedish Engineers' Society may be formed in the City of Chicago.
- Sec. 4. Should any funds belonging to the Society be in existence at the time of dissolution, such funds and money shall be turned over to the party taking custody of the Society's property, as a compensation for services to be rendered.

#### ARTICLE XI.

#### Order of Business.

The order of business shall be as follows:

- 1. Call to order by the President.
- 2. Reading of the minutes.
- 3. Report of Board of Directors.
- 4. Report of standing and special committees.
- 5. Unfinished business.
- 6. New business.
- 7. Reading of papers and discussion of same.
- 8. Election of officers (at the December meeting).
- 9. Adjournment.

# Membership List

- ABRAHAMSON, O. E. J., Active Member, 1913. Secretary 1917, one-third 1918. Res., 508 Englewood Ave., Chicago, Ill.
- ACKANDER, ALBERT B., Charter Member. Corresponding Member, 1908. Res., Ocean Springs, Mo.
- ACKERLIND, D. M., Corresponding Member, 1916.

  Automobile Designer, Vilie Motor Vehicle Co., Moline.
  Res., 517 42nd St., Rock Island, Ill.
- ADAMSON, ERNST HJALMAR, Corresp. Member, 1916. U. S. Naval Gun Factory, Washington, D. C. Res., 1516 Kearney St., N. E., Washington, D. C.
- AKERS, AXEL, Active Member, 1913.

  Treasurer, 1915-1916.

  Forge Plant Engineer, Symington Chicago Corp.
  Res., 7357 Vernon Ave., Chicago, Ill.
- AHLBERG, G. A. F., Corresponding Member, 1910. With Ahlberg Kerosene Carborator Company, 2539 Oliver Building, Pittsburgh, Pa.
- AKERLIND, G. A., Charter Member, Life Member, 1908. Secretary, 108-09-10 11 12-13-15. Inspecting Engineer, Bridge Dept., City Hall, Chicago, Res., 536 Rush St., Chicago, Ill.
- AKERLIND, J. AD., Corresponding Member, 1909. Constructing Engineer. Res., Hedemora, Sweden.
- ALBIHN, PERCY, Active Member, 1919. Manufacturer. 2127 Humboldt Blvd., Chicago, Ill.
- ALZEN, CARL A., Charter Member, Active Member, 1908. Fire Protection Engineer, "Royal" of Liverpool. Res., 5240 Kenmore Ave., Chicago, Ill.
- ANDERSON, CARL A., Active Member, 1915.
  President, Reliance Elevator Company.
  Res., 1503 Lake Ave., Wilmette, Ill.

- ANDERSON, C. B., Active Member, 1913. With Western Electric Co., Hawthorne, Ill. Res., 6147 Champlain Ave., Chicago, Ill.
- ANDERSON, CARL F., Active Member, 1913. Vice President, 1919. Manufacturer. Res., 121 South Austin Ave., Chicago, Ill.
- ANDERSON, JOHN C. A., Active Member, 1914. Treasurer, Reliance Elevator Company, 212 West Austin Ave., Chicago, Ill.
- ANDERSON, JOHN F., Corresponding Member, 1913. Contractor and Engineer. 3136 Front St., San Diego, California.
- ANDERSON, JOHN M., Active Member, 1916.
  Estimator, Bulley K. Andrews, General Contractors.
  Res., 7950 Princeton Ave., Chicago, Ill.
- ANDERSON, H. A., Active Member, 1908. With Central Iron Works, Chicago. Res., 342 W. Chicago Ave., Chicago, Ill.
- ANDERSON TESCH, HJALMAR G., Corresp. Member, 1918.
  Commercial Attache of the Swedish Government,
  Swedish Consulate General,
  New York, N. Y.
- ASTROM, CARL P., Corresponding Member, 1915. Chief Engineer, M. H. Treadwell Co., New York. Res., 14 Chestnut St., East Orange, N. J.
- AXEL, SWEN, Corresponding Member, 1912. Res., Kungsholmsgatan 30, Stockholm, Sweden.
- AXELL, C. G., Active Member, 1909.
  Vice President, 1911. Secretary, 1914.
  Engineer of Elec. Design, Commonwealth Edison Co.
  5838 Wayne Ave., Chicago, Ill.
- BAARNHIELM, BIRGER, Corresponding Member, 1919.
  Manager of the Inter-National Concrete Company,
  Stockholm, Sweden.
  Swedish Legation, Rio de Janeiro, Brazil.
- BAGGE, NILS O., Corresponding Member, 1919. Consulting Engineer, 203 Broadway, New York City, N. Y.

- BALCHER, MARTEN, Charter Mem., Active Member, 1908. With Blomfeldt & Rapp Co., Chicago. Res., 1422 Belle Plaine Ave., Chicago, Ill.
- BENSON, E. WM., Active Member, 1919. Superintendent, American Art Bronze Foundry, 2852 Logan Blvd., Chicago, Ill.
- BERG, ERNST J., Sc. D., Life Member, 1910.
  President, 1911.
  Professor of Electrical Engineering,
  Union College, Schenectady, N. Y.
- BERG, GUSTAV, Corresponding Member, 1909. General Manager, "Lux" Company, Stockholm, Sweden.
- BERGEN, THEODORE A., Corresponding Member, 1913. Chief Electrical Engineer, A.-B. Industribyrån, Västra Trädgårdsgatan 7, Stockholm, Sweden.
- BERGENDORF, G., Corresponding Member, 1912. Superintendent, Rock Island Plow Co., Rock Island. Res., 850 22nd St., Rock Island, Ill.
- BERGESEN, JOHN, Corresponding Member, 1918. Architect, 135 W. 126th St., New York, N. Y.
- BERGMAN, L. H., Active Member, 1918.

  Vice President and Treasurer,
  American Industrial Engineering Company,
  452-453 Monadnock Building, Chicago,
  Res., 4134 Kenmore Ave., Chicago, Ill.
- BERGQUIST, CARL, Corresponding Member, 1909. With Corn Products Refining Co., Philadelphia, Pa.
- BERGQUIST, J. G., Charter Member, Life Member, 1908.
  Consulting Engineer.
  Res., Glen Head, Long Island, N. Y.
- BERGSTROM, GUNNAR, Corresponding Member, 1919. Engineer, Munktells Mekaniska Verkstads A. Bol., Eskilstuna, Sweden.
- BILLNER, K. P., Corresponding Member, 1916. Billesholms Grufva, Sweden.

- BIRKLAND, EMIL E., Active Member, 1909. With Crane Company, Chicago. Res., 1417 N. California Ave., Chicago, Ill.
- BJURSTROM, K. GUSTAF A., Charter Member.
  Active Member, 1908. Treasurer, 1911.
  Pilot Engineer, Valuation Dept., C. & N.-W. Ry. Co.
  Res., 2136 Morse Ave., Chicago, Ill.
- BJÖRKSTEDT, WILLIAM, Corresponding Member, 1910. With Bayonne Steel Co., Bayonne, N. J.
- BJÖRNBOM, T., Corresponding Member, 1912. With Luth & Rosen's Elek. A.-B., Stockholm. Res., Högbergsgatan 54, Stockholm, Sweden.
- BJÖRNCRANTZ, FRANZ, Associate Member, 1916. Superintendent of Printing. Res., 1445 Farragut Ave., Chicago, Ill.
- BLOMFELDT, P. AXEL, Active Member, 1912. With Blomfeldt & Rapp Co., Chicago. Res., 6523 Greenview Ave., Chicago, Ill.
- BOLIN, C. A., Corresponding Member, 1908.

  Treasurer, 1913-1914. Vice President, 1916.

  Engineering Department, Western Electric Co., Inc., 463 West Street, New York City.

  Res., 967 Bergen St., Brooklyn, N. Y.
- BOMB, KARL, Corresponding Member, 1910. With H. Koppers Company, Pittsburgh, Pa. Res., 6109 Alder St., Pittsburgh, Pa.
- BORG, FRED G., Active Member, 1910. Engineer of Shops, Chicago Surface Lines. Res., 6943 Eberhardt Ave., Chicago, Ill.
- BORGMAN, OSCAR J., Active Member, 1916. Architectural Draftsman, Standard Forgings Co. Res., 1444 Berwyn Ave., Chicago, Ill.
- BOSTROM, CHARLES, Active Member, 1918. Building Commissioner of Chicago. Res., 5254 Wayne Ave., Chicago, Ill.
- BROBERG, FREY L., Corresponding Member, 1918. Engineer, T. W. Price Engineering Co., Room 1350 Woolworth Building, New York, N. Y.

- BROBERG, H. A., Corresponding Member, 1910. National Lead Company of California. 485 California Ave., San Francisco, California.
- BRORSON, CARL, Corresponding Member, 1917. Carpenter Engineering & Machine Co. Res., 1521 10th Ave., So., Minneapolis, Minn.
- BRUNNER, JOHN, Charter Member, Active Member, 1908.
  President, 1916.
  Asst. Inspecting Engineer, Illinois Steel Co., Chicago.
  Res., 627 Dartmouth Place, Evanston, Ill.
- BRÖMS, C. O. J., Corresponding Member, 1913. Ingeniör, Sandvikens Jernverks A.-B., Sandviken, Sweden.
- BYLANDER, SVEN, Corresponding Member, 1918.
  Consulting Engineer,
  44 Longridge Road, Earls Court, London, England.
- CARLSON, ANDRCV, Active Member, 1910. Manufacturer. Res., 6030 Sheridan Road, Chicago, Ill.
- CARLSON, CHARLES A., Active Member, 1916. Forging and Structural Steel. Res., 4710 N. Albany Ave., Chicago, Ill.
- CARSON, C. E., Active Member, 1909. Vice President, 1914. General Contractor. Res., 928 Argyle Ave., Chicago, Ill.
- CEDERBLOM, RAGNAR, Corresponding Member, 1912.
  Designer, Republic Iron & Steel Co.
  Res., 1627 Nimrod Ave., Youngstown, Ohio.
- CEDERBORG, G. V., Corresponding Member, 1910. A.-B. Svenska Sockerfabriken, Arlöf, Sweden.
- CEDEROTH, ALEF, Active Member, 1913. With Great Lakes Dredge Coompany. Res., 4058 Broadway, Chicago, Ill.
- CHRISTIANSON, DAVID, Active Member, 1918. With Illinois Steel Company. Res., 1020 Leland Ave., Chicago, Ill.

- CHRISTIANSON, JOHN A., Active Member, 1919.

  Assistant Engineer of Erection and Construction,
  Standard Forgings Company.

  Res., 7218 Vernon Ave., Chicago, Ill.
- COLGREN, A. F., Charter Member, Active Member, 1908.

  Manufacturer.

  Res., 233 W. 61st St., Chicago, Ill.
- CRONQUIST, G. W:SON, Corresponding Member, 1913. Assistant Director, A.-B. Raméns Patenter, Helsingborg, Sweden.
- DAHLBERG, GUSTAVE, Active Member, 1915. The Industrial Staff Engineers. Res., 3239 Eastwood Ave., Chicago, Ill.
- DAHLIN, ERNST, Corresponding Member, 1910. Chemist, Tidafors Sulfitfabrik, Sandhem. Res., Tidafors, Sandhem, Sweden.
- DEDERING, HELMER, Active Member, 1912. With Mark Manufacturing Co., Indiana Harbor, Ind. Res., 6426 Vernon Ave., Chicago, Ill.
- DEHLIN, MARTIN, Active Member, 1910. With Western Steel Car & Foundry Co., Hegewisch, Res., 13328 Burley Ave., Hegewisch, Ill.
- DEVIN, KLAS LUDVIG, Corresponding Member, 1910. With American Bridge Coompany. P. O. Box 1556, Pittsburgh, Pa.
- DUNER, JOHN C., Active Member, 1910. Manufacturer, 101 S. Clinton St., Chicago. Res., Wheaton, Illinois.
- EDLUND, K. EDW., Corresponding Member, 1912. With Oxelösunds Jernverk, Sweden. Res., Oxelösund, Sweden.
- EHRLING, GUNNAR E., Corresponding Member, 1919.

  Mechanical Engineer,

  American Coal and By-Product Coke Co.,

  Crystal Lake, Ill.
- EICHHORN, M. J., Charter Member, Active Member, 1908.
  Mechanical Engineer.
  With Sargent & Lundy, Engineers.
  Res., 502 W. 60th Place, Chicago, Ill.

- EKBLOM, F. W., Active Member, 1915. With Leonard Construction Company, 2130 W. Jackson Blvd., Chicago, Ill.
- EKLUND, JOEL, Active Member, 1917. Supervisory Engineer, Joseph Schneible. Res., 5105 N. Ashland Ave., Chicago, Ill.
- EKLUND, SVEN, Active Member, 1913. With Graham Supply Company, Chicago. Res., 5030 Warwick Ave., Chicago, Ill.
- ELMZEN, AXEL F., Corresponding Member, 1918. With Illinois Zink Company, Peru, Ill.
- ENGBLOM, PER NIKANOR, Corresponding Member, 1917. Chemical Engineer, 92 West Ave., Buffalo, N. Y.
- ENGWALL, CHARLES F., Charter Member, Active Member, 1908. Contractor. Res., 3143 Wilson Ave., Chicago, Ill.
- ERICSON, E. J., Charter Member, Active Member, 1908. With American Industrial Engineering Company. Res., 5045 Cullom Ave., Chicago, Ill.
- ERICSON, JOHN, R. V. O., Active Member, 1910.
  President, 1912 and 1914.
  City Engineer, City Hall, Chicago.
  Res., 848 Lakeside Place, Chicago, Ill.
- ERICSSON, CHARLES T., Corresponding Member, 1918. Chief Engineer, Wern Machinery & Engineering Co. Res., 48 Lexington Ave., New York, N. Y.
- ERICSSON, HENRY, Charter Member, Life Member, 1908.
  President, 1913.
  General Contractor, City Hall Square Building.
  Res., 534 Surf St., Chicago, Ill.
- ERICSSON, JOHN E., Charter Member, Active Member, 1908
  Vice President, 1915. President, 1918.
  General Contractor,
  Lanquist & Illsley Company, Chicago.
  Res., 4530 Beacon St., Chicago, Ill.
- ERIKSON, CARL E., Active Member, 1910. Res., 4844 North Irving Ave., Chicago, Ill.

- ERIKSON, CLIFFORD E. J., Corresponding Member, 1910. U. S. A.
- ERICKSON, EMIL, Active Member, 1912. President Erickson Machinery Company, 638 Federal St., Chicago, Ill.
- · ERIKSON, MAURITZ L., Active Member, 1919. Chief Draftsman, Pettibone-Mulliken Co. Res., 1131 N. Laramie Ave., Chicago, Ill.
  - ESBJÖRNSON, ÅKE, Corresponding Member, 1910. Patent A.-B. Jungners Kali-Cement, Norrköping, Sweden.
  - FERNGREN, AUGUST, Active Member, 1910.
    Manager, A. F. Cement Construction Company.
    Res., 3052 Davlin Court, Chicago, Ill.
  - FOCK, OSCAR, Corresponding Member, 1913. With Tammerfors Linne Jern Mnfr. Co., Tammerfors, Finland.
  - FOGEL, J. P., Active Member, 1913.

    Mechanical Engineer,

    Western Electric Company, Hawthorne, Ill.

    Res., 4210 N. Sawyer Ave., Chicago, Ill.
  - FOGEL, R. W., Active Member, 1909.
    Architect, with E. C. & R. M. Shankland, Chicago.
    Res., 1839 Warner Ave., Chicago, Ill.
  - FREDRICKSON, GOTTFRIED, Corresp. Member, 1910. With Aktiebolaget Hamilton & Hansell, Vestra Kajen 12, Helsingfors, Finland.
  - FRIBERG, EMIL, Active Member, 1912. Superintendent, Lanquist & Illsley Co., Chicago. Res., 4619 Dover St., Chicago, Ill.
  - FRIES, J. ELIAS, Corresponding Member, 1919. Chief Electrical Engineer, Tennessee Coal, Iron & R. R. Co., Birmingham, Ala.
  - FRÖLEN, FREDRIK, Corresponding Member, 1914. With Nickols & Todsen Company, Stockholm. Res., Odensgatan 17, Stockholm, Sweden.

- GABRIELSON, ERIK V., Corresponding Member, 1910. Engineer, Allmänna Sv. Elektriska A.-B., Vesterås. Res., Floragatan 17, Vesterås, Sweden.
- GORANSON, S. G., Active Member, 1912. Treasurer, 1918. With Collins Safety Razor Co., Chicago. Res., 643 Melrose Ave., Chicago, Ill.
- GRANDAHL, CARL G., Active Member, 1919.
  Surveyor and Superintendent of Buildings,
  Landquist & Illsley Company.
  Res., 5353 Wayne Ave., Chicago, Ill.
- GRANLUND, G. A., Corresponding Member, 1918. Superintendent, Monarch Machine Tool Co., Sidney, Ohio.
- GRUNDSTROM, ERIK G., Active Member, 1918.

  Pattern Manufacturer.

  Res., 1709 W. 64th St., Chicago, Ill.
- GULLBORG, JOHN S., Active Member, 1909.

  Treasurer, 1917.

  President, Alemite Metals Company, Chicago, Res., 4631 Beacon St., Chicago, Ill.
- GUSTAFSON, CHAS. J., Active Member, 1919. Engineer, Stromberg Motor Device Company. Res., 8025 S. Throop St., Chicago, Ill.
- GUSTAFSON, G. EDWARD, Active Member, 1912. Civil Engineer, E. C. & R. M. Shankland, Chicago. Res., 1213 Eddy St., Chicago, Ill.
- HAGELTHORN, BROR G. S., Corresponding Member, 1918. With Atlas Ball Co., Philadelphia, Pa.
- HAGELTHORN, THOMAS, Active Member, 1918.

  District Engineer for the Price Engineering Co.
  Res., 904 Winona St., Chicago, Ill.
- HALL, ERIC E., Active Member, 1909. County Architect, 11 South La Salle St., Chicago. Res., 1214 Cornelia Ave., Chicago, Ill.
- HAMREN, ERIK O., Corresponding Member, 1916. With T. L. Smith Company, 1125 32nd St., Milwaukee, Wis.

- HASSELQUIST, HUGO S., Active Member, 1913. Works Manager, Collins Safety Razor Co., Chicago. Res., 4109 Greenview Ave., Chicago, Ill.
- HAWKINS, KARL, Active Member, 1916. With Security Tool Works, 115 S. Clinton St., Chicago, Ill.
- HEDELIN, C. W., Charter Member, Active Member, 1908.With Illinois Steel Company, North Works.Res., 4822 N. Ashland Ave., Chicago, Ill.
- HEDENSKOG, ERNEST, Corresponding Member, 1918. Engineer. Muskegon, Mich.
- HEDMAN, C. M., Active Member, 1910.

  President, Hedman Manufacturing Company, Chicago.
  Res., 3144 Sheridan Road, Chicago, Ill.
- HELLMAN, FREDRICK, Corresponding Member, 1914. Res., 9-11 Engelbrektsgatan, Stockholm, Sweden.
- HENREKSON, JOHN W., Corresponding Member, (1913. General Manager, Ahlen & Holm, Insjön, Sweden.
- HERLENIUS, JONAS, Corresponding Member, 1918. Metallurgist,
  - Electric Furnace Dept., Hamilton & Hansell, Inc. Res., 41 W. 69th St., New York City, N. Y.
- HILLBERG, A. G., Corresponding Member, 1916.
  Chief Engineer and Manager,
  Engineering and Contracting Department,
  Pacific Commercial Company, Manila, P. I.
- HODELL, ERNST, Corresponding Member, 1916. With Bergslagernas Järnvägar. mål, Sweden.
- HODGSON, JOHN F., Active Member, 1915.
  With The Steel Tube Company of America,
  Mark Station, Indiana.
  7719 Evans Ave., Chicago, Ill.
- HOKANSON, BROR M., Corresponding Member, 1919. Research Engineer, With Marshall-Wells Company, Duluth, Minn.

- HOLM, ERIC E., Corresponding Member, 1912.
  Mining Engineer,
  Loussavaara-Kirunavaara Aktiebolag.
  Res., Malmberget, Sweden.
- HOLMEN, A. R., R. V. O., Corresponding Member, 1909. Chief Draftsman, Pennsylvania Lines, Columbus, O. Res., 73 Cleveland Ave., Columbus, Ohio.
- HOLMER, F. N., Corresponding Member, 1916.With U. S. Slicing Machinery Co., La Porte, Ind. Res., 912 Monroe St., La Porte, Ind.
- HOLMES, SVEN, Charter Member, Corresp. Member, 1908. Hatton, Klein & Holmes, Masonic Temple, Cedar Rapids, Iowa.
- HULTAN, K. A., Corresponding Member, 1916. P. O. Box 933, Tacoma, Wash.
- HVITFELDT, ROBERT, Associate Member, 1909.

  Designer and Engraver, 508 S. Dearborn St., Chicago.
  Res., 1329 Carmen Ave., Chicago, Ill.
- HYTTENBERG, EUGEN, Corresponding Member, 1914. Lieutenant. Address, Norrviken, Sweden.
- IGGBERG, F. W., Corresponding Member, 1909.
  Vice President, 1912. President, 1917.
  General Superintendent, Logansport Machinery Co.
  Res., 2200 Broadway, Logansport, Ind.
- INGEMANSON, THURE W., Active Member, 1918.

  Asst. Engineer, Lewis Institute Structural Materials
  Research Laboratory of the Portland Cement Ass'n.
  Res., 5840 Chicago Ave., Chicago, Ill.
- JEPPSON, GEORGE N., Corresponding Member, 1918. Works Manager, Norton Company. Res., 41 Burncoat St., Worchester, Mass.
- JERNBERG, CARL, Active Member, 1910.
  Superintendent, Standard Forgings Company,
  Indiana Harbor, Ind.
  Res., 6550 Harvard Ave., Chicago, Ill.
- JERNSTROM, JOSEPH AXEL, Corresp. Member, 1917. Chemist, American Smelting & Refining Co., Omaha. Res., 2313 Douglas Ave., Omaha, Neb.

- JETTE, AUGUST GABRIEL, Active Member, 1918. Structural Engineer. Res., 1454 Argyle St., Chicago, Ill.
- JOHANSON, THURE A., Active Member, 1909. Superintendent, Cable Piano Company. Res., St. Charles, Ill.
- JOHNSON, ARTHUR A. V., Corresponding Member, 1913. Res., 247 Sheridan St., Zanesville, Ohio.
- JCHNSON, AXEL, Active Member, 1919. Engineer, Western Electric Company. Res., 1523 S. 56th Ct., Cicero, Ill.
- JOHNSON, BROR, Corresponding Member, 1915. With Chile Exploration Company, Chuquicamata, Chile.
- JOHNSSON, EMIL, Active Member, 1918. Mechanical Engineer, National X-Ray Reflector Co. Res., 844 Grace St., Chicago, Ill.
- JOHNSON, THURE ELON, Active Member, 1918. With Standard Forgings Company. Res., 7432 St. Lawrence Ave., Chicago, Ill.
- JOHNSTON, J. HILDING, Active Member, 1918. With New City Iron Works. Res., 6417 S. Artesian Ave., Chicago, Ill.
- JONSSON, SIXTEN, Active Member, 1914. Estimator and Engineer, Lanquist & Illsley Company, Chicago. Res., 2330 115th St., Chicago, Ill.
- KARLSON, G. L., Corresponding Member, 1917. Res., 271 Hick St., Brooklyn, N. Y.
- KIHLSTEN, GUSTAF E., Corresponding Member, 1919. With New York Shipbuilding Corporation. Res., 326 Carteret St., Camden, N. J.
- KROPP, C. A., Active Member, 1914.

  President, Kropp Forge Company, Chicago.
  Res., 2512 W. 21st St., Chicago, Ill.
- KUYLENSTJERNA, ADOLF, Corresponding Member, 1909.
  Mechanical and Electrical Engineer.
  With The American Railways Company,
  913 Witherspoon Building, Philadelphia, Pa.

- LAGERGREN, G. P., Active Member, 1917. With Leonard Construction Company, Chicago. Res., 6052 Ingleside Ave., Chicago, Ill.
- LAGERHOLM, EVAR, Active Member, 1914. Sales Engineer, Illinois Tool Works, Chicago. Res., 1417 Farragut St., Chicago, Ill.
- LANQUIST, ANDREW, Active Member, 1910.
  Builder, Lanquist & Illsley Company, Chicago.
  Res., 4630 Beacon St., Chicago, Ill.
- LARSON, AXEL F., Active Member, 1909. Superintendent, The Marquette Piano Co., Chicago. Res., 7925 S. Peoria St., Chicago, Ill.
- LARSON, C. S., Active Member, 1918.

  Hydraulic Engineer, Symington Chicago Corporation.

  Res., 5630 Winchester Ave., Chicago, Ill.
- LARSON, P. L., Active Member, 1912.

  President and Treasurer, Central Iron Works, Chicago
  Res., 3628 W. Fulton St., Chicago, Ill.
- LARSSON, THURE, Corresponding Member, 1918.

  Mechanical Engineer,

  With Norton Company, Worchester, Mass.
- LAUREN, J. W., Active Member, 1918.

  President, American Iudustrial Engineering Co.,
  452-453 Monadnock Building, Chicago.
  Res., 4136 Kenmore Ave., Chicago, Ill.
- de LAVAL, CARL GEORGE, Corresponding Member, 1918.

  Vice President and General Manager, American Shell
  Co. and East Jersey Pipe Corp., Paterson, N. J.
  Res., 462 Third St., Brooklyn, N. Y.
- LEFFLER, HAKON M., Corresponding Member, 1912. Res., Ljusne, Sweden.
- LETH, ERIC GUNNAR, Corresponding Member, 1917. Chemist, with Eli Lilly & Co., Pharmaceutical Chemists, Indianapolis, Ind. Res., 820 N. East St., Indianapolis, Ind.
- Vice President, Leonard Peterson & Co. Res., 3437 Sunnyside Ave., Chicago, Ill.

- LEVIEN, RAGNAR J. O., Active Member, 1914.

  Designer, with Roberts & Schaefer Company.
  Res., 243 Mason Ave., Chicago, Ill.
- LEVIN, A. M., Corresponding Member.
  Professor, Kungl. Tekniska Högskolan, Stockholm,
  Res., Karlavägen 43, Stockholm, Sweden.
- ·LEVIN, ASTOLF P. E., Corresponding Member, 1909. With de Laval Separator Co., New York, N. Y. Res., 462 Third St., Brooklyn, N. Y.
- LEVIN, N. D., Charter Member, Corresp. Member, 1908.
  Chief Engineer,
  The Jeffrey Manufacturing Company, Columbus, O.
  Res., 1814 N. High St., Columbus, Ohio.
- LIDSEEN, GUSTAVE, Active Member, 1912.
  Manufacturer.
  Res., 434 South Scoville Ave., Oak Park, Ill.
- LINDAHL, CHARLES O., Active Member, 1919.
  Western Sales Manager, Union Radiator Company.
  Res., 4908 N. Troy St., Chicago, Ill.
- LINDBERG, V. EMIL, Active Member, 1914. With Federal Tool & Alloy Steel Co., N. Y. & Chicago Res., 5806 Ridge Ave., Chicago, Ill.
- LINDBERG, TORVALD, Corresponding Member, 1910. Address, Box 445, Marshfield, Oregon.
- LINDEBLAD, EINAR, Active Member, 1916. With Swedish Iron & Steel Corporation, 654 W. Lake St., Chicago, Ill.
- LINDGREN, W. L., Active Member, 1915.
  President, Security Tool Works, Chicago.
  Res., 5950 Dakin St., Chicago, Ill.
- LINDQUIST, O. F., Corresponding Member, 1912.
  General Contractor.
  Address, Route No. 5, Box 44, Springfield, Mo.
- LINDWALL, K. G., Active Member, 1912. With Fort Dearborn National Bank, Res., 1140 Ashland Ave., Hubbord Woods, Ill.
- LJUNGBECK, TAGE G., Corresponding Member, 1916.

  Mechanical Engineer.

  Res., Kungsgatan 30, Malmö, Sweden.

- LUND, A. G., Charter Member, Active Member, 1908. Architect, 810 W. 63rd St., Chicago, Ill. Res., Palos Park, Illinois.
- LUNDBERG, SVEN, LIEUT., Corresponding Member, 1914. Asst. Superintendent, Nobel Bros., Baku, Russia. Res., Barnhusgatan 13, Stockholm, Sweden.
- LUNDGREN, ADOLPH, Active Member, 1912. General Contractor. Res., 6828 Normal Blvd., Chicago, Ill.
- LUNDQUIST, BRYNOLF, Active Member, 1918.
  With Fibre Making Processes, Inc., Sulphate Dept.
  Res., 4419 N. Lincoln St., Chicago, Ill.
- LUNDQUIST, HJALMAR, Associate Member, 1908. With Universal Tool & Die Works, Chicago. Res., 1421 Summerdale Ave., Chicago, Ill.
- LUNDQUIST, JOEL, Active Member, 1917. Civil Engineer. 3012 Prairie Ave., Chicago, Ill.
- LÖFWEBERG, JOHAN, Corresponding Member, 1917. Sweden.
- MAGNUS, CARL E., Active Member, 1917. Tool Designer. Res., 4514 Clarendon Ave., Chicago, Ill.
- MAGNUS, ELMER G., Active Member 1919. Chief Draftsman, G. F. Bryant. Res., 1215 Waveland Ave., Chicago, Ill.
- MAGNUSON, ALFRED V., Active Member, 1919.
  Machine Salesman.
  Res., 3443 Carol Ave., Berwyn, Ill.
- MAGNUSON, T. J., Active Member, 1914. Superintendent, H. E. Pridmore Molding Machine Co. Res., 6542 Artesian Ave., Chicago, Ill.
- MALLING, MALTE, Active Member, 1912. With International Harvester Company, McCormick Works, Chicago. Res., 5243 Hutchinson St., Chicago, Ill.

- MALMSTEN, J. O., Active Member, 1916.

  Mechanical Designer,

  Western Electric Company, Hawthorne, Ill.
  Res., 4043 Nelson St., Chicago, Ill.
- MALMSTROM, ALEX. G., Corresponding Member, 1909.
  Chief Draftsman,
  National Cash Register Company, Dayton, Ohio.
  Res., 143 Indiana Ave., Dayton, Ohio.
- MATTSON, ERICK, Active Member, 1917.

  Tool Designer, with Miehle Printing Press Mfg. Co.
  Res., 3526 N. Crawford Ave., Chicago, Ill.
- MAYER, C. H., Active Member, 1909. Secretary, 1918-1919. Engineer, R. E. Schmidt, Garden & Martin, Architects Res., 1455 Balmoral Ave., Chicago, Ill.
- MELLQUIST, AXEL, Corresponding Member, 1912. With Stephens Adamson Manufacturing Company, 50 Church St., New York, N. Y.
- MILDE, IVAR, Corresponding Member, 1910. Kungl. Vattenfallsstyrelsen, Klara 23, Karlstad, Sweden.
- MODINE, A. B., Corresponding Member, 1910.

  Modine Manufacturing Company, Racine, Wis.
- MONSON, AXEL A., Active Member, 1915. Manager, Universal Stamping & Manufacturing Co. Res., 4519 Virginia Ave., Chicago, Ill.
- MONSEN, GUNNAR S., Corresponding Member, 1910. General Contractor. Res., örebro, Sweden.
- MOSSBERG, FRANK, Corresponding Member, 1914.
  President, Frank Mossberg Co., Attleboro, Mass.
  Res., Attleboro, Mass.
- NANNFELDT, GEORGE, Active Member, 1910. With Lind Belt Company, Chicago. Res., 8147 Throop St., Chicago, Ill.
- NANNFELDT, JAKOB, Corresponding Member, 1913. With Allis-Chalmers Mfg. Co., West Allis, Wis. Res., 555 72nd Ave., West Allis, Wis.

- NAUCKHOFF, B., Corresponding Member, 1913. With Zenite Metal Company, Indianapolis, Ind.
- NELSON, NELS, Active Member, 1918.

  Superintendent, Universal Portland Cement Company,
  Buffington, Ind.
  Res., 6601 Minerva Ave., Chicago, Ill.
- NELSON, OSCAR, Active Member, 1914. With Crane Company, Chicago. Res., 3242 W. Monroe St., Chicago, Ill.
- NICHOLSON, VICTOR, Active Member, 1913.
  Vice President, 1918.
  Engineering Chemist,
  Bureau of Streets, City of Chicago.
  Res., 7621 Lowe Ave., Chicago, Ill.
- NILSON, OLOF GUSTAF, Active Member, 1919.
  Manufacturer,
  319 W. Ohio St., Chicago, Ill.
- NORBERG, HARALD, Corresponding Member, 1914. With C. E. Johansson, Inc. Res., 2365 Park Ave., Indianapolis, Ind.
- NORDER, G., Corresponding Member, 1909. Res., Holmgatan 13, Falun, Sweden.
- NORDQUIST, R. E. J., Active Member, 1917.

  Assistant Chief Draftsman,

  American Can Company, Maywood, Ill.

  Res., 202 North Central Ave., Chicago, Ill.
- NORDSTROM, CARL G., Corresponding Member, 1918. Engineer, Machinery Dept., Bethlehem Steel Co. Res., 20 S. New Ave., Bethlehem, Pa.
- NORELL, MARTIN, Charter Member, Active Member, 1908.
  Chief Draftsman,
  Chicago Steel Car Company, Harvey, Ill.
  Res., 8121 Loomis St., Chicago, Ill.
- NORGREN, OSCAR B., Active Member, 1918. Superintendent, Pensacola Ship Building Co. Res., 3143 Eastwood Ave., Chicago.
- NORLIN, FRED, Charter Member, Active Member, 1908.
  Civil Engineer and Surveyor,
  30 North La Salle St., Chicago.
  Res., 2744 Mildred Ave., Chicago, Ill.

- NORLING, REINHOLD A., Corresponding Member, 1913. With Aurora Automatic Machine Co., Aurora, Ill. Res., 180 Wilder St., Aurora, Ill.
- NYBERG, HENRY, Charter Member, Life Member, 1908.
  President, 1908-1909.
  Automobile Manufacturer.
  Res., Kitchener, Ontario, Canada.
- NYDEN, JOHN A., Active Member, 1913.

  Architect, State-Lake Building, Chicago.
  Res., 5511 Wayne Ave., Chicago, Ill.
- NYQUIST, CARL JOHAN, Active Member, 1917. Manager, Torchweld Equipment Company. Res., 1349 Winnemac Ave., Chicago, Ill.
- OFVERBERG, C. G. N., Corresponding Member, 1918. Res., 111 Austin St., Cambridge, Mass.
- OLSON, EDWIN A., Associate Member, 1918. Lawyer. Res., 3030 Sheridan Road, Chicago, Ill.
- OLSON, JOHN O., Corresponding Member, 1910.
  Chief Engineer,
  With Hubbard Ice Company, Cedar Rapids, Iowa.
  Res., 1206 Fourth Ave., Cedar Rapids, Iowa.
- OLSON, KARL E., Active Member, 1913.
  Chief Chemist,
  Metals & Thermit Corporation, East Chicago, Ind.
  Res., 1105 Beacon St., East Chicago, Ind.
- OLSON, KLAS O., Active Member, 1909.
  Building Superintendent.
  Leonard Construction Company, Chicago.
  Res., 1474 Foster Ave., Chicago, Ill.
- ONGMAN, CLARENCE S., Active Member, 1912.
  Vice President, 1917. President, 1919.
  Foreman, Water Pipe Extension, City Hall, Chicago.
  Res., 5549 Glenwood Ave., Chicago, Ill.
- OSTERGREN, ROBERT C., Active Member, 1909.
  Vice President, 1912.
  Captain, Quartermasters Corps,
  Construction Division, U. S. Army.
  Res., 3144 Sheridan Road, Chicago, Ill.

- OSTLIND, BENJAMIN, Corresponding Member, 1914. Consulting Engineer and Architect. Res., Irving Block 206, Marchfield, Oregon.
- öSTLIN, OLOF, Corresponding Member, 1909.

  Mechanical Engineer,

  Bolinders Mekaniska Verkstäder, Stockholm, Sweden.
- OWERSTROM, R. A., Active Member, 1918. With Security Tool Works. Res., 933 Newport Ave., Chicago, Ill.
- PARKE, PETER, Active Member, 1910. Chief Engineer, Pullman Company, Chicago. Res., 5466 Everett Ave., Chicago, Ill.
- PEARSON, HAROLD, Active Member, 1912. Superintendent, Torchweld Equipment Company, Res., 7244 Dobson Ave., Chicago, Ill.
- PETERSON, C. H., Active Member, 1914.

  President, Iron Mountain Company.

  Vice President, Jackson Park Machine Company.

  Res., 6528 Everett Ave., Chicago, Ill.
- PETERSON, C. S., Active Member, 1912.

  Director, Peterson Linotyping Company, Chicago.
  Res., 757 Buena Ave., Chicago, Ill.
- PETTERSON, HUGO, Corresponding Member, 1912.
  Construction Engineer,
  Mount Vernon Bridge Company, Ohio.
  Res., 506 E. Gambier St., Mt. Vernon, Ohio.
- PETTERSON, HJALMAR, Corresponding Member, 1909. With Finland State Railway, Helsingfors, Finland. Res., Borgågatan 21, Helsingfors, Finland.
- PIHL, KARL, Active Member, 1914. General Manager, B. & K. Electrical Mfg. Co., 147-9 W. Austin Ave., Chicago, Ill.
- RANDERS, F., Active Member, 1912. With Sargent & Lundy, Engineers. Res., 846 Roscoe St., Chicago, Ill.
- RANG, C. E., Associate Member, 1913. U. S. A.

RAPP, AXEL G. J., Active Member, 1917.

Development Engineer,
Link-Belt Company, Chicago.
Res., 1255 Rosedale Ave., Chicago, Ill.

RAPP OSCAR, Active Member, 1916.

Manufacturer,

Blomfeldt & Rapp Company, Chicago.
Res., 1443 Berwyn Ave., Chicago, Ill.

RENNERFELT, IVAR, Corresponding Member, 1909. Chief Engineer, A.-B. Elektriska Ugnar, Stockholm, Sweden. Res., Vanadisvägen 24, Stockholm, Sweden.

RESARE, NILS A. F., Active Member, 1918. With Inland Steel Co., Indiana Harbor, Ind. Res., 2330 W. 115th St., Chicago, Ill.

RISSLER, ALBIN, Charter Member, Life Member, 1908.
President, 1915. Vice President, 1908-09-10.
Mechanical Engineer,
Chicago Railway Equipment Company, Chicago.
Res., 7225 Emerald Ave., Chicago, III.

ROOS, GUNNAR, Corresponding Member, 1910. With Ludvigsbergs Verkstads-Aktiebolag, Stockholm. Res., Heimdalsgåtan 1, 3tr., Stockholm, Sweden.

RYDSTEDT, S. D., Active Member, 1918.

Mechanical Engineer,
Stewart-Warner Speedometer Corporation, Chicago.
Res., 3004 Blaine Place, Chicago, Ill.

RYDSTROM, UNO, Corresponding Member, 1913. With A.-B. Diesel Motorer, Stockholm. Res., Hornsgatan 26-1, Stockholm, Sweden.

SAFSTROM, ERLAND, Active Member, 1914.
Mechanical Designer,
The B. F. Cummings Mfg. Co., Chicago.
Res., 5120 Glenwood Ave., Chicago, Ill.

SAHLIN, JOHN, Corresponding Member, 1912. Manufacturer. Grand Rapids, Michigan.

SANDEGREN, ANDREW, Active Member, 1910. Architect, 2064 Conway Building, Chicago, Ill.

- SANDELL, H. K., Active Member, 1910. With Mills Novelty Company, Chicago. Res., 1640 Farragut Ave., Chicago, Ill.
- SANDSTROM, GEORGE F., Active Member, 1919. The Industrial Staff Engineers. Res., 405 E. 45th St., Chicago, Ill.
- SäVE, CARL, Active Member, 1912.
  Secretary, 1916.
  With Leonard Construction Company, Chicago.
  Res., 3214 Hirsch St., Chicago, Ill.
- SEABERG, CLARENCE O., Corresponding Member, 1918.
  Draftsman,
  732 Woodsworth Ave., Alma, Mich.
- SEABERG, FRED., Charter Member, Active Member, 1908. Treasurer, 1908-1909. Chief Engineer, J. S. Bryant Machine Co., Chicago. Res., 5247 Glenwood Ave., Chicago, Ill.
- SEAHOLM, M. A., Acitve Member, 1917.

  Mechanical Draftsman and Machine Designer,
  American Can Company, Maywood, Ill.
  Res., 903 North Avenue, Maywood, Ill.
- SCHOEN, NILS, Active Member, 1918.

  Pattern Manufacturer.

  Res., 6349 S. Honore St., Chicago, Ill.
- SCHOTT, JOHN H., Active Member, 1912. Architect. Res., 744 Garden Terrace, Chicago, Ill.
- SJOBERG, SIDNEY THOR, Active Member, 1918.
  Assistant Chief Engineer,
  Whiting Foundry Equipment Co., Harvey, III.
  Res., 918 Waveland Ave., Chicago, III.
- SJOLANDER, AXEL K., Active Member, 1914. Treasurer, 1918-19. Engineer, Link-Belt Company, Chicago. Res., 1438 Summerdale Ave., Chicago, Ill.
- SJÖSTRÖM, FRANK, Active Member, 1913. Draftsman. Res., 3239 Leland Ave., Chicago, III.

- SJUNESON, OLOF, Active Member, 1919. Draftsman. Res., 6320 Sangamon St., Chicago, Ill.
- SKJÖLD, GÖSTA, Corresponding Member, 1909. Kungl. Vattenfallsstyrelsen, Stockholm, Sweden. Res., Forshaga, Sweden.
- SKOGMARK, JOHN, Corresponding Member, 1912. Res., 35 Nassau St., New York, N. Y.
- SODERBECK, ADOLPH R., Active Member, 1917. Superintendent, Pollak Steel Company. Res., 7823 Saginaw Ave., Chicago, Ill.
- SODERSTAM, J. T., Active Member, 1910. Civil Engineer, The Sanitary District of Chicago. Res., 1211 Newport Ave., Chicago, Ill.
- SONANDER, JOSEF, Corresponding Member, 1912. With International Harvester Corporation, P. O. Box 1131, Moscow, Russia.
- SPAAK, CHAS. E., Corresponding Member, 1910. Res., Alingsås, Sweden.
- STAKE, CLAUS H., Corresponding Member, 1919. With American Machinery Company. Res., 1312 N. Oxford St., Indianapolis, Ind.
- STERZEL, S. E., Corresponding Member, 1912. Res., Kaponiergatan 5, Gothenburg, Sweden.
- STJERNSTEDT, J. W., Corresponding Member, 1912. Res., 402 Rialto Building, San Francisco, Calif.
- STOLNACKER, EMIL A., Active Member, 1918. With Inland Steel Company, Indiana Harbor, Ind. Res., 300 W. 112th St., Chicago, Ill.
- STRANDBERG, ERIK P., Active Member, 1912. General Contractor. Res., 5027 Drexel Blvd., Chicago, Ill.
- STRANDELL, JOHANNES G. A., Active Member, 1918. Electrical Engineer, Arnold Company. Res., 6935 S. Laflin St., Chicago, Ill.
- STRID, SVEN J., Charter Member, Active Member, 1908. With Central Locomotive & Car Works. Res., 1424 E. 72nd Place, Chicago, Ill.

- STRUKEL, ARVID, Corresponding Member, 1912. Res., Andrégatan 7, Helsingfors, Finland.
- SUNDSTROM, CARL A., Active Member, 1918. With American Bridge Co., Gary, Ind. Res., 6042 Michigan Ave., Chicago, Ill.
- SUNNERGREN, S. P., Corresponding Member, 1912. Chief Draftsman, Denver & Rio Grande Railroad Co., Denver, Colo. Res., 3447 Pecos St., Denver, Colo.
- SWENSON, CARL G., Corresponding Member, 1915. Vice President, Oakes Pressed Steel Company. Res., 1623 Fletcher Ave., Indianapolis, Ind.
- SWENSON, GODFREY, Corresponding Member, 1916.
  President and Treasurer, Swenson Construction Co.
  Res., 78 Lydia St., Kansas City, Mo.
- SYLVAN, CHR., Corresponding Member, 1910. Editor of Industritidningen "Norden," Stockholm. Res., Tunnelgatan 19A, Stockholm, Sweden.
- TEVANDER, SWAN N., Active Member, 1917. Equipment Department, American Can Company, 405 N. Fourth Ave., Maywood, Ill.
- THYBERG, GUSTAF A. H., Corresponding Member, 1919. Superintendent, N. Y. Produce Exchange Building. Res., 2 Broadway, New York, N. Y.
- TJÄDER, JOHN, Corresponding Member, 1909. Res., Birkagatan 18, Stockholm, Sweden.
- TORNBERG, KARL, Corresponding Member, 1910. Chemist and Mining Engineer, Oliver Iron Mining Company, Norway, Michigan.
- TURNQUIST, EDW., Corresponding Member, 1917. Res., 201 Garfield St., Alexandria, Ind.
- TÖRJESON, T. A., Corresponding Member, 1915. Ingeniör, Kungl. Järnvägksstyrelsen, Stockholm. Res., Saltsjöbaden, Sweden.
- VELANDER, V. R., Corresponding Member, 1910. With Willis E. Holloway Company, Cleveland, Ohio. Res., 3340 W. 110th St., Cleveland, Ohio.

- WÆSSMAN, L. G., Active Member, 1913.Chemist.Res., 3239 W. Congress St., Chicago, Illl.
- WÆSSMAN, JOHN R., Active Member, 1918.
  Chemist, Metals & Thermit Corp., East Chicago, Ind.
  Res., 4240 Osgood Ave., Chicago, Ill.
  Res., 4509 Tod Ave., East Chicago, Ind.
- WAHLBERG, NILS ERIK, Corresponding Member, 1917.Major, U. S. A.Res., 2021 N. St., Washington, D. C.
- WALLENIUS, CHARLES B., Corresponding Member, 1918. Engineer, Ford Motor Company. Res., 337 Prospect Pl., New York, N. Y.
- WANDELL, IVAR, Corresponding Member, 1914. Res., 611 California Ave., South Bend, Ind.
- WAXBOM, CHAS. J. E., Corresponding Member, 1910. Consulting Engineer. Res., 151 E. Park St., Westerville, Ohio.
- WEDBERG, SVEN H., Corresponding Member, 1913. Res., Döbelsgatan 5-III, Stockholm, Sweden.
- WENNERBERG, AUGUST, Active Member, 1915. Consulting Engineer. Res., 3042 Keating Ave., Chicago, Ill.
- WERME, HAROLD, Corresponding Member, 1948. Chief Engineer, Zenite Metal Company. Res., 1348 N. Erving St., Indianapolis, Ind.
- WERN, GUST. PERS., R. V. O., Active Member, 1912.
  President, Wern Mach. and Eng. Company,
  30 Church St., New York, N. Y.
- WERNER, F. J., Active Member, 1914.
  Assistant Master Mechanic,
  Inland Steel Company, Indiana Harbor, Ind.
  Res., 3433 Michigan Ave., Indiana Harbor, Ind.
- WESTBERG, CARL A., Active Member, 1910. Vice President, East Chicago Company, Indiana Harbor, Ind. Res., 301 W. 67th St., Chicago, Ill.

- WESTERBERG, HUGO EM., Active Member, 1910. With American Can Company. Res., 3528 Broadway, Chicago, Ill.
- WESTERLIND, CARL, Active Member, 1909.
  Treasurer, 1910.
  Architect.
  Res., 1201 Ainsley St., Chicago, Ill.
- WESTIN, ALBERT A. W., Active Member, 1918. Building Superintendent. Res., 626 W. 61st St., Chicago, Ill.
- WESTMAN, ERIC EDWIN, Corresponding Member, 1918.
  Purchasing Agent, Stutz Motor Car Company.
  Res., 720 N. Illinois St., Indienapolis, Ind.
- WEYDELL, F. O., Charter Member, Active Member, 1908.

  Manufacturer, 12 South Clinton St., Chicago.

  Res., 7100 Ridge Blvd., Chicago, Ill.
- WEYDELL, JARL MAGNUS, Corresponding Member, 1917. Electrical Engineer. Res., 820 N. East St., Indianapolis, Ind.
- WICKLAND, ALGOT A., Active Member, 1910.
  Treasurer, 1912.
  With Frank D. Chase, Inc., Chicago.
  Res., 4539 North Whipple St., Chicago, Ill.
- WIDELL, M. E., Active Member, 1914.

  Chief Draftsman, American Can Co., Maywood, III.

  Res., 1512 S. 8th Ave., Maywood, III.
- WIEBE, SIGURD J. A., Corresponding Member, 1918.
  President and General Manager,
  American Toyland Creators, Inc.
  Res., 570 44th St., Brooklyn, N. Y.
- WILANDER, P., Corresponding Member, 1909. With Whitaker & Glessner, P. O. Box 536, Portsmouth, Ohio.
- WINGREN, ARTHUR, Corresponding Member, 1912. Address, Finnboda Slip, Stockholm, Sweden.

- WITTING, ALBIN G., Active Member, 1916.

  Assistant Chief Engineer, Indiana Steel Co., Gary, Ind.

  Res., 610 W. 8th Ave., Gary, Ind.
- WOHLBERG, J. A., Charter Member, Active Member, 1908. With Illinois Steel Company, South Chicago, Ill. Res., 6346 S. Wood St., Chicago, Ill.
- YOUNGBERG, CONRAD D., Active Member, 1918.

  Tool Designer and Efficiency Man, Goddard Tool Co.
  Res., 1466 Gregory St., Chicago, Ill.



#### MEMBERS

of

## The Swedish Engineers' Society of Chicago May 1, 1919

Honorary Members	2
Life Members	6
Active Members	160
Corresponding Members—	
In U. S. A., Canada and South America	82
In Europe	50
Associate Members	5
Total Members	323

# **Annual Report**

of the

# Swedish Engineers' Society of Chicago 1918

During the past years events of such an enormous scope have taken place, changes of conditions have been so rapid and extensive with its climax in the successful termination of the European War, into which our adopted country had thrown its complete man power and resources. The comparatively less important events such as local affairs have therefore been, and justly so, almost entirely put aside.

It was to be expected that this condition would have brought to a standstill the work carried on by the different societies and organizations not directly or indirectly connected with war work. The Engineers and Enginering societies on the other hand have been so closely affiliated with the final outcome of the war that the activities of these organizations have increased rather than decreased, and it became evident that now or never would the Engineer step to the front and demand a full recognition. This is also what has happened and it is the co-operative efforts on the part of the Enginering societies which has made this recognition possible.

Our society, recognizing the importance of this co-operative movement, has given it its fullest and heartiest support. We have been represented on the war committee technical societies of Chicago and given this committee our moral and financial support. This committee, organized to solve technical problems in this community in connection with the war work, was entirely successful, considering the short period of its existence.

Our society also rendered the Government the financial aid its resources would permit, purchasing in the month of April a \$100.00 Third Liberty Bond.

The following members of the Swedish Enginers' Society entered into active military service at the call of the Government:

O. E. J. Abrahamson, Alef Cederoth, C. E. J. Erikson, S. G. Goranson, Oscar Nelson, John A. Nyden, Robert Ostergren, C. E. Rang, L. G. Wæssman, Nils Erik Wahlberg and Dr. Julius Carlson.

At the joint convention of the American Association of Engineers with the committee on Engineering co-operation, our Society was well represented. The important work of this convention is clearly shown by the official report issued at that time.

In the month of May, the Society decided to endorse applications for stipendium by members of the Swedish Engineers Society from Kungliga Kommerskollegium in Sweden. During the year, this decision has been carried into effect through the renewal of the stipendium certificate for our corresponding member William Bjorkstedt.

The Society celebrated its 10th anniversary, October 12th, for which a successful banquet had been arranged at the Swedish Club. Approximately one hundred of the societies' members with ladies and friends were present. For the occasion a short review of the societies' activities had been prepared by Mr. K. G. Lindwall. The principal speakers were Messrs. Peter Parke, E. J. Ericson and Clarence S. Ongman.

The membership of the Swedish Engineers' Society on January 1st, 1919, was as follows:

Honorary Members, 2; Life Members, 6; Active Members, 163; Associate Members, 5; Corresponding Members, U. S. A., 84; Corresponding Members, abroad, 47; Total, 307.

As officers for the year 1918 have served: President, John E. Ericsson; Vice President, Victor Nicholson; Secretary, 1st quarter, O. E. J. Abrahamson; Secretary, balance of year, C. H. Mayer; Treasurer, 1st half of year, S. G. Goranson; Treasurer, balance of year, Axel K. Sjolander.

As officers for the year 1919 have been elected: President, Clarence S. Ongman; Vice President, C. F. Anderson; Secretary, C. H. Mayer; Treasurer, Axel K. Sjolander.

During the year the Society has held six meetings of an educational nature, one annual meeting, one annual ball and banquet, the 10th anniversary banquet and a crawfish party.

For more complete detail of the activities of our Society during the past year the members are referred to the comprehensive reports of the various committee.

C. H. MAYER, Secretary.

#### TREASURER'S REPORT FOR YEAR 1918.

To The Swedish Enginers' Society of Chicago.

Gentlemen—The following shows the receipts and disbursements of money and financial standing of the Society for the year ending December 31, 1918:

#### RECEIPTS

Balance from year 1917\$1	
Money received during year 1918 1	1,177.67
Total\$2	2,704.61
DISBURSEMENTS	
Expenses for the year 1918\$1	,264.21
ASSETS ON HAND DEC. 31, 1918	
Commonwealth Edison Co. Bond No. 18095 1	,035.00
Permanent Fund in Savings Bank	68.07
Interest for same for year 1918 entered in pass book January, 1919\$1.02	
Third Liberty Loan Bond	100.00
Cash in Bank	237.33

. The following is an itemized account of receipts and expenditures during the year 1918:

#### ITEMIZED RECEIPTS DURING 1918

Received from Applications\$	104.00
Received from Dues (Active)	839.50
Received from Dues (Corresponding)	135.00
Received from Dues (Associate)	11.00
Received from Interest on Bonds	51.49
Received from House Committee	27.00
Received from Interest on Savings Book	9.68

\$1,177.67

\$2,704.61

## ITEMIZED DISBURSEMENTS DURING 1918

Office Rent in City Hall Square Building	\$ 450.00
Printing and Engraving	
Addressograph Company	
Chicago Telephone Company	
Commonwealth Edison Company (Light)	
War Committee of Technical Societies	25.00
Lecture Committee, Lamp	3.13
Library Committee	51.80
Swedish Societies' Old People's Home	50.00
House Committee	27.96
American Surety Company	10.00
Chicago Tribune (Adv.)	5.40
Secretary's Expenses	56.96
Treasurer's Expenses	11.49
Collection charges in bank	50
	\$1,264.21
ASSETS	Ψ1,201.21
2-10-11-2-10	,
Commonwealth Edison Company Bond	\$1,035.00
Commonwealth Edison Company BondPermanent Fund, Savings Account	\$1,035.00
Commonwealth Edison Company Bond	\$1,035.00 68.07 2 100.00
Commonwealth Edison Company Bond	\$1,035.00 68.07 2 100.00
Commonwealth Edison Company Bond	\$1,035.00 68.07 2 100.00 237.33
Commonwealth Edison Company Bond	\$1,035.00 68.07 2 100.00 237.33
Commonwealth Edison Company Bond	\$1,035.00 68.07 2 100.00 237.33 \$1,440.40
Commonwealth Edison Company Bond	\$1,035.00 68.07 2 100.00 237.33 \$1,440.40
Commonwealth Edison Company Bond	\$1,035.00 68.07 2 100.00 237.33 \$1,440.40 4 0
Commonwealth Edison Company Bond	\$1,035.00 \$68.07 2 100.00 237.33 \$1,440.40 4 0
Commonwealth Edison Company Bond Permanent Fund, Savings Account Savings Bank int. for 6 mos. entered in pass book, \$1.0 Third Liberty Loan Bond Cash on Hand  Balance Dec. 31, 1917 Total Assets Dec. 31, 1918  Difference \$86.5	\$1,035.00 68.07 2 100.00 237.33 
Commonwealth Edison Company Bond Permanent Fund, Savings Account Savings Bank int. for 6 mos. entered in pass book, \$1.0 Third Liberty Loan Bond Cash on Hand  Balance Dec. 31, 1917 Total Assets Dec. 31, 1918  Difference \$86.5 Outstanding Dues in U. S. A., Dec. 31, 1918	\$1,035.00 \$1,035.00 \$68.07 2 \$100.00 \$237.33 \$1,440.40 4 0 

Respectfully submitted,

AXEL K. SJOLANDER, Treasurer.

#### REPORT FROM THE AUDITING COMMITTEE

Chicago, Ill., January 25, 1919.

To The Swedish Engineers' Society of Chicago.

Gentlemen—The undersigned, having been appointed a committee to audit the Treasurer's books for 1918, find them to be correct, and the Society's finances as follows:

### RECEIPTS

Balance on hand January 1, 1918	,526.94
Money received during 1918 1	
	,704.61
EXPENDITURES	
Total expenditures during 1918\$1	,264.21
Balance on hand Dec. 31, 1918.	,440.40
*2	,704.61
The balance on hand consists of:	
One Commonwealth Edison Bond No. 18095\$1	,035.00
One Third 41/4% Liberty Bond No. 40022220	100.00
Permanent Fund in Savings Bank	68.07
Cash in Bank Dec. 31, 1918	237.33

\$1,440.40

We take pleasure in recommending that the Society accept with a vote of thanks, the faithful services rendered by its Treasurer, A. K. Sjolander.

Respectfully submitted,

AXEL AKERS, E. SAFSTROM, G. DAHLBERG.

#### REPORT OF THE LECTURE COMMITTEE

Hon. President and Fellow Members.

The Lecture Committee for 1918 consisted of the following: Mr. Axel Akers, Mr. Klas Olson and Mr. R. W. Fogel.

At the April meeting an illustrated lecture by Mr. H. W. Dunbar of the Norton Grinding Company, entitled "The Evolution of the Grinding Machine," was presented, Mr. Dunbar coming from Massachusetts to deliver same.

"Re-enforced Concrete" was presented by Mr. W. Stuart Tait, Vice President and Chief Engineer of the Tait Engineering Company, at the May meeting. This illustrated lecture being the last word in re-enforced concrete construction.

An illustrated lecture on the "Vehicle Tax of Chicago" was given by our Vice President, Mr. V. Nicholson, at the June meeting.

A lecture on Conveying and Elevating Machinery was given by our Treasurer, Mr. Axel K. Sjolander, at the November meeting.

The lecture committee wishes to extend its thanks to the Society's officers and members for their kind co-operation during the year.

Respectfully submitted this 25th day of January, 1919.

AXEL AKERS, Chairman.

#### REPORT OF THE LIBRARY COMMITTEE

Chicago, Ill., April 19, 1919.

To The Swedish Engineers' Society of Chicago.

In reporting the activities of the Library Committee for the year 1918, it may be remembered that it took over a department of our Society which had, since its beginning, been neglected for various reasons. The first move, therefore, was to lay plans for a collections of books that would be within the means of the Society and at the same time fill demands that are peculiarly our own and are not already met with by other technical libraries in the country. It was considered a waste of money and effort to build up a library of general technical and scientific works, and the following three aims only would be attempted:

- 1. Representative handbooks in different branches of engineering. It would be reasonable to assume that every engineer has the necessary volumes treating his own specialty. But it occasionally happens that he needs information on a foreign subject, and it should be possible for him to get that at our library.
- 2. A complete collection of works on engineering and natural sciences by Swedish-born authors, published in the English language. The advantages of an undertaking of this kind are apparent both to the engineer with a mainly practical education and the one with a preponderatingly theoretical training. The historical value thereof would be very great to Swedes and Americans alike. The inspiration it would be for many a young engineer, disheartened by the hard knocks of the first years in a strange country, to try everlastingly for the loftiest rungs of his profession, is no doubt of importance not only to himself but to his fellow members of a society which has included principles of this class in its constitution. By assembling in one place on

American soil results of labor on a very high intellectual level carried out by those of our countrymen here who are best fitted to represent what our mother country can accomplish of international value for the progress of mankind, we are able to demonstrate in a convincing way the cultural standing of Sweden. There is need for that sort of propaganda, as we all know, and our society can properly engage therein.

3. The third branch of the library should be an exhibit of text books in engineering and related sciences, used in the Swedish schools. It should contain typical examples of these written for the coming engineer from his first lessons in mathematics in the public school until he graduates from the most advanced seat of learning in his chosen field. This would tend to impress on an ambitious technical man who has not had the advantage of a complete course in the higher institutions where modern engineering is taught that his knowledge may be inferior to that of his competitors. Lack of professional education often has kept a technical man, devoted to his calling, from taking the place in industry his gifts have intended him for. The requirements in this respect are growing larger every year. As a matter of fact it can be stated without hesitation that a greater part of the Swedish-born engineers residing in the United States who have gained prominence are university graduates.

If an American parallel to this collection of Swedish text books also were made the usefulness thereof would be greatly increased and the library of the Swedish Engineers' Society of Chicago would be one attainment we all would be justified in being proud of.

The preliminary steps for executing the above plans have been taken and as the majority of the committee has been honored by reappointment the probability is that they will be greatly advanced during the year.

It only remains to add that the periodical matters as part of the routine work have been subscribed for in due time, regularly placed on the table in an orderly way and subsequently carted off to some mysterious hiding place.

A filing system for the present books proved premature but a list of them has been made up.

With an expression of great esteem for the qualities of my collaborators, Messrs. E. Lindeblad and G. Nannfeldt.

Respectfully submitted,

HUGO EM. WESTERBERG, Chairman.

#### REPORT OF MEMBERSHIP COMMITTEE.

Chicago, January 25, 1919.

Mr. President and Fellow Members of The Swedish Engineers' Society of Chicago.

Gentlemen—The Membership Committee hereby takes pleasure in submitting its report of activities during the year 1918.

Immediately upon taking up our duties, we conceived the idea of starting a Century Club, which met instant favor with several of our members. As the name indicates the purpose of this club was to secure 100 new members during the year.

In spite of war conditions and other drawbacks, this club has been able to secure 57 new members, and while we have not attained our goal, it is most gratifying to note the high calibre of new material acquired. These results have been achieved by a mere handful of members, who have worked hard. The membership committee wishes hereby to thank those who have cooperated with them so loyally, and suggest that the new membership committee organize a double century club for 1919. If every member of the Society resolves to bring in at least one new member during the coming year, it will be very easy to enroll 200 new enthusiasts for our Society.

Respectfully submitted,

C. S. ONGMAN, ChairmanC. H. MAYER,C. E. CARSON,Membership Committee.

#### REPORT OF THE HOUSING COMMITTEE

To The Swedish Engineers' Society of Chicago.

The Housing Committee has during the past year had several offers to locate the Society in new quarters, but upon investigation it has been found that the location or space or the rent has not been as favorable as for the office which the Society has been and still is maintaining.

The intention of the committee was to find a larger space suitable for Secretary's office, library and meeting room, but the rents for such a place in a central location would have been not less than \$50.00 per month, which was more than the Society could afford.

An offer from the Svithiod Singing Club was turned down at a regular meeting. An offer to buy a house boat had to be turned down on account of inability to find a suitable anchoring place or harbor. The Swedish Club also turned down an inquiry made by letter to that society.

The committee, finding itself unable to proceed any further, reported this at a regular meeting held by the Society, and it was decided to renew the lease for the present office for one more year.

Chicago, Ill., January 3, 1919.

KLAS O. OLSON, Chairman.

#### THE TENTH ANNIVERSARY OF OUR SOCIETY

celebrated October 12, 1918, with a successful banquet at the Swedish Club, was attended by approximately 80 of the Society's members, ladies and friends. Many telegrams were received from various members.

The following telegram was sent to the Swedish Minister in Washington, W. A. F. Ekengren:

The Swedish Engineers' Society, assembled in celebration of its tenth anniversary, sends its hearty greetings in commemoration of your presence at the First Swedish Engineering Convention in Chicago in September, 1915.

JOHN E. ERICSSON, President. C. H. MAYER, Secretary.

In reply the Swedish Consulate of Chicago received the following telegram, dated October 12, 1918:

Please present to Mr. John E. Ericsson, President, and Mr. C. H. Mayer, Secretary, of the Swedish Engineers' Society, my heartiest thanks for their very kind greetings. My visit to Chicago as the guest of the Swedish Engineering Convention, nineteen fifteen, shall always remain to me one of the most pleasant memories.

May the Swedish Engineers' Society of Chicago ever prosper.

W. A. EKENGREN.

Minister of Sweden.

The following history of the Swedish Engineers' Society of Chicago was prepared for the occasion by Mr. K. G. Lindwall:

#### OUR RECORD

In the year 1892 existed in Chicago a Swedish engineers' society as a branch of "Svenska Ingeniörsföreningen i Förenta Staterna," New York, and during the World's Fair in Chicago this society was very active, but on account of hard times following the year of 1894, the members became scattered and the society was later dissolved.

In 1903 a group of engineers, descendants of the three Scandinavian countries, organized the Scandinavian Technical Society of Chicago.

1908—On account of the differences in opinions amongst the members of the society, 30 members withdrew, and at a meeting called by G. A. Akerlind, Oct. 10 of the same year, the Swedish Engineers' Society was founded, Henry Nyberg being elected president, and G. A. Akerlind secretary.

1909—The first roster was issued showing a membership of 74. At the election of officers for 1910, G. A. M. Liljencrantz was elected president and Akerlind re-elected secretary.

1910—Regular meetings were held every month and 48 new members were registered. At the November meeting it was decided to keep closer connection with other Swedish organizations in Chicago.

1911—As president for this year served Dr. Ernst J. Berg, professor of electrical engineering at the Illinois University. Dr. Berg aimed to raise the standard of the society by arranging the social life of the society in accordance with ideas current among American professional men. At the Polhem celebration in Stockholm, the society had a special representative in our member Chr. Sylvan. Permanent quarters were established in the City Hall Square building. Our library was instituted on motion by Hugo Em. Westerberg, who served as our first librarian.

1912—John Ericson, city engineer of Chicago, took charge as president, and as a result of his activities, we find a great success of the life of our society as a technical body. The society was represented by our member, Harold Kjellstedt, at the 50th anniversary of Borås Teknologförening. Life membership was established with the following members: Dr. Ernst Berg, Messrs. Henry Nyberg, J. G. Bergquist, Henry Ericsson.

June 25—The society was incorporated.

1913—President, Henry Ericsson. At the annual meeting in January a new life giving factor was injected into the society by publishing of the first copy of "Trasdockan," which publication proposed by C. G. Axell, later has appeared as a permanent feature. As honorary members were elected Dr. Anton Julius Carlson, professor of physiology, University of Chicago, and G. A. M. Liljencrantz, assistant engineer, United States Engineers' office, Chicago.

1914—At the annual meeting the first page of "Trasdockan" was confiscated and caused a certain gloom to the meeting which only was relieved when John Ericson, for the second time, was installed as president. A committee was appointed to take part in the work for organization of the Swedish Engineering Convention in Chicago, 1915.

1915—Albin Rissler, president. Up to this time, Mr. Akerlind had faithfully served the society as secretary, but on account of his work now not being permanently confined to Chicago, he tendered his resignation, and C. G. Axell was appointed to take his place for the balance of the year. September 9, 10, 11, the first Swedish Engineering Convention in the United States of America took place in Chicago. The proceedings of this convention were published in a memorial book issued by the society.

1916—John Brunner, assistant inspecting engineer of Illinois Steel Co., Chicago, president. The publication of "S. E. S. Notes" was started. The society participated in collecting funds for erection of a statue of our illustrious countryman, Captain John Ericsson, inventor of the Monitor.

1917—F. W. Iggberg, president; O. E. J. Abrahamson, secretary. Presumably on account of the war the activities of the society suffered a slight decrease. Membership was taken out in the Swedish Societies' Old People's Home Association, Chicago.

1918—John E. Ericsson, president; C. H. Mayer, secretary. At the June meeting it was decided on motion by Hugo Em. Westerberg to endorse stipends granted members of the society by departments of the Swedish government. The society has during the year received a splendid recognition by the different technical bodies of Chicago and vicinity, and has been invited to participate in the organization of the War Committee Technical Societies of Chicago. It is gratifying to note when judging the progress of our society and the interest shown by its members and friends that the lecture committee under the leadership of Axel Akers has secured a number of good lecturers and that the membership

committee headed by Clarence Ongman has also rendered a splendid service. These factors no doubt will contribute to a continuous success of the society.

Membership today—275.

On the tenth anniversary we all join in a greeting of friendship and well wishes to the following members who have joined the colors of our adopted country:

O. E. J. Abrahamson, Clifford Erikson, Alef Cederoth, S. Gunnar Göranson, Oscar Nelson, John A. Nyden, C. E. Rang, Nils Erik Wahlberg.

The following speeches were delivered:

#### "OUR SOCIETY"

By E. J. Ericson.

Mr. Toastmaster, Ladies, Gentlemen and Fellow Members.

I am very glad indeed to have the privilege of being with you this evening, on this occasion, being the tenth annual anniversary of our society.

Looking backward, I remember the organization and activity of its immediate predecessor, the Scandinavian Technical Society. When that society finally showed signs of dissention of proper growth, quite a number of members withdrew and proposed to form a Swedish Engineers' Society. This project was carried through in an admirable manner, thanks largely to our indefatigable worker and chief organizer, G. A. Akerlind. He may truly be called the father of our society—and you will note he has quite a large family—and we are all justly proud of him. Mr. Akerlind has the faculty of enlisting our co-operation, eliminating friction and petty differences, and thus advancing our interests professionally and socially.

On returning to Chicago two years ago, after an absence of 11 years, I was glad to find the society's affairs in capable hands, in the younger regime. This is also evident from the constantly increasing membership and general activity.

The engineer's value—by the term engineer is here included, civil, mechanical, electrical, chemical, mining and metallurgical engineers—to the community has been sadly underestimated in the past. It took a great world war to open the eyes of our leading men and the public at large, to the value of the engineer's service in war, and it is no less true in times of peace. Before a

brilliant gathering like this it is not necessary to go into details as to how the human race is benefited by science and applied technology. We have all enjoyed its blessings in the past, and let us hope it will be more abundantly still in the future. In these stirring times particularly, I would like to impress upon you all the necessity of co-operation and boosting our society, and remember the old adage that, in unity there is strength; "United we stand, divided we fall" at least short of attaining our maximum usefulness.

Now a few words in regards to our house problem. I am in perfect accord with the previous speaker, Mr. Wern, that we should let it rest for the present. When some benefactor of the society comes across with a gift of 25 or 50 thousand dollars, it will be time to consider building our own home. In the meantime we are satisfactorily served by our downtown office, and alternating between the Swedish and Svithiod clubs, for our social affairs and meetings.

I thank you for your kind attention.

#### OUR COUNTRY

By Peter Parke.

I believe in the United States of America as a government of the people, by the people, and for the people, whose just powers are derived from the consent of the governed, and because of that belief, and love for this country, I am gratified that I have been asked to speak to you tonight of "Our Country." It might be more appropriate for me to refer to it as "Adopted Country," but I feel as free to drop the adjective as any one born here.

To all of us this is now OUR country, and it is a country to be proud of.

I shall not burden your mind with remarks about its material greatness and advantages, but for a few moments dwell on a few of those records of human achievements in freedom and liberty, about which we have reason to feel proud. For, as the torch of liberty lights the way for those who first enter our portals, so our country's efforts is a flaming torch lighting for other nationalities the broad way to freedom for all.

Ours is not a history of wars and the doings of kings and potentates, but a human history of the common people perfecting themselves in all of those efforts which uplift mankind. A history of a peoples earnest endeavors, always to play fair with themselves and the world at large. With such basis for diplomatic relation between nations is it any wonder that the old world's deceitful diplomacy is no match for the straight from the shoulder truthfulness of our "untrained" diplomats. Ours is the one nation to appear before the world with an absolutely clean record.

There is no training necessary for an honest man to speak the truth, it is the state of an honest mind. When this American spirit of fairness, of straight and honest dealings, permeates all nationalities, then, and not until then, will war be a thing of the past.

Is there in history anything more inspiring than our colonial history; our declaration of independence; the personalities of our great leaders.

Go back to colonial days and we find:

Roger Williams (one of the noblest figures in colonial history), introducing elections by paper, on the principle that government power was derived from the free and voluntary consent of all free inhabitants, a principle as strongly brought to the fore by America today, as it was in Roger Williams' Rhode Island Colony.

William Penn, the greatest of all the founders of American colonies, is typical of that fair-mindedness, sincerity, hospitality and fair dealing, which characterizes the true American, no matter what his descent. The invitation which he extended to all people to come here and secure for themselves the full benefit of their own endeavors, is as heartily extended to all by America today, and as the downtrodden protestants of North of Ireland and the Rhine countries flocked to William Penn's colony so the downtrodden of all lands long for American freedom and look for American assistance.

America's spirit breathes in that immortal document, The Declaration of Independence. It declares: "A decent respect to the opinion of mankind requires that they should declare the causes which impel them to the separation."

"A decent respect to the opinion of mankind"—that is typical Americanism. What horrors in this world of ours would have been avoided if all peoples' government had been actuated by that principle, are too vividly before your minds to require reference to details.

Live fair, act fair, and if you must fight, fight fair; that also is Americanism, and at this moment, when liberty is the watchword of the day, we can proudly say in the words of Daniel Webster, that—"That love of Liberty, and that understanding of its true principle, which are flying over the whole earth, as on the wings of the wind, are really and truly of American origin."

Remarks about OUR COUNTRY would not be complete without the mentioning of the names of those two greatest of all Americans, George Washington and Abraham Lincoln. It is with admiration and a feeling akin to reverence that we read about the profound wisdom, the love for their fellow men and the devotion to their country which filled their lives and permeates their public addresses. "With malice toward none, with charity for all"—is the Americanism as expressed by the immortal Lincoln.

If I do not deceive myself, I am sure that today are being produced by another American president, documents, clear statements of principles, and state papers covering our activities, which in history will rank with the best efforts of our great men, and that history will accord a place among the names of our greatest men, to the name of Woodrow Wilson. (And I am not in politics a democrat either.)

Notwithstanding our love for the peaceful pursuit of happiness we have had wars, because we are far from being a "peace at any price" nation, we do not want to avoid war to the shame of our soul. In our wars we have displayed the broad and generous spirit of our institutions. When the United States was forced to war on Mexico, we paid for the two states we required Mexico to cede to us. No other government would be likely to treat a conquered nation thus, and no other, would continue to suffer such indignities from a neighboring nation as we for years patiently have endured; all the while earnestly trying to be of assistance to those whom we realize "know not what they do."

We paid Spain \$20,000,000 indemnity for the privilege of helping the Philippine people on the road toward self-government, and yet, we did not lose the war with Spain.

Do not acts like these make you feel proud of OUR GOVERN-MENT. Contrast this with Germany's treatment of the deluded Russians in the Brest-Litovsk treaty, supposedly to be based upon the principles of no annexation and no indemnities.

Proudest of all we may rightly feel about the wonderful effort we are now exerting for the American principles of freedom and self-determination for all people.

Without thought of recompense, we are willingly making the greatest sacrifice in human history, and the sacrifice shall not

be made in vain. I sincerely trust that as a result of this supreme effort "national greed, avarice and ambition shall be banished from the earth."

I have tried to point out briefly why we have exceptional reasons to be proud of OUR COUNTRY, its history and its institutions, which briefly summarized, I have endeavored to show are built upon a foundation of Freedom, Humanity and Justice; and now in conclusion let each one of us, as loyal citizens of our adopted country, worthy of our forbearers, the honest, industrious, and patriotic citizens of that small country, with a noble history, Sweden, always be loyal to our obligations and subscribe to the creed which I recently noted on a card, labeled "The American's Creed," and with the opening statement of which I commenced my remarks.

The creed is this: "I believe in the United States of America, as a government of the people, by the people, for the people; whose just powers are derived from the consent of the governed; a democracy in a republic; a sovereign nation of many sovereign states; a perfect union, one and inseparable; established upon those principles of freedom, equality, justice and humanity, for which American patriots sacrificed their lives and fortunes.

"I, therefore, believe it is my duty to my country to love it, to support its constitution, to obey its laws, to respect its flag, and to defend it against all enemies."



# In Memoriam

MAJOR ERIC BERGLAND, who joined our Society as early as 1909, died after a long illness, Nov. 3, 1918, in Baltimore, Md.

Major Bergland was born April 21, 1844, in Alfta, Helsingland, Sweden. He came to America with his parents in 1846 and stopped in Bishop Hill, Ill. In 1856 he became connected with "Svenska Republikanaren," a newspaper published in Galva, but later moved to Chicago, where Mr. Bergland became manager of a printing establishment.

Sept. 14, 1861, Bergland joined Co. D, 57th Infantry Regiment of Volunteers from Illinois. He received a commission as second lieutenant. After the battle at Shiloh he was advanced to first lieutenant. Lieutenant Bergland now gained admission to West Point, from which he graduated June 15, 1869. He was made second lieutenant of the 5th Artillery, and was promoted to first lieutenant June 10, 1872; captain, Jan. 10, 1884, and major, Oct. 12, 1895. He retired March 31, 1896, after a service of 30 years.

Major Bergland, in April, 1873, was made assistant instructor of military engineering at West Point. Later he was engaged with the engineering corps surveying in California, New Mexico, Nevada and Colorado. In May, 1878, he was called as instructor in mathematics to the West Point Military Academy.

Major Bergland was married June 5, 1878, to Miss Lucy Scott McFarland of Kentucky. He leaves three sons and one daughter.

AXEL KARLSTEEN, member of the Swedish Engineers' Society since the year 1912, died last August in Chicago.

Born in Sala, Vestmanland, Sweden, Jan. 19, 1858, he received in his youth a good education, attending Allmänna Läroverket in his home town and later Tekniska Skolan in Stockholm. During the years 1881-83 he was engaged with his two brothers in building contracting in Stockholm. In 1887 he came to America and has since that time been engaged as building contractor in Chicago, being known as one of the most prominent contractors among the Swedes of this city.

He married Miss Hulda Rydberg from Stockholm, and at the time of his death leaves two sons and one daughter. Mr. Karlsteen being member of several Swedish societies and other organizations, made a score of friends whose respect and love followed him to the end.

L. HARALD KELLSTEDT, who joined our Society in December 1910, died last October in Scranton, Pa.

Mr. Kjellstedt was born in Borås, Sweden, Jan. 12, 1864; graduated in 1883 from Borås Technical School; became assistant engineer with the Royal Surveying Department 1884-87; was city editor for Borås Tidning 1887-89.

Mr. Kjellstedt now left Sweden and came to America, where he became connected with the International Correspondence Schools at Scranton, Pa. year 1892, being its principal for a numebr of years.

Mr. Kjellstedt's broadness, high ideals and dignity, befitting his position as an educator and executive, made him a place high in the estimation of those he associated with. Fearless, frank and optimistic, he was an enthusiastic booster of the institution which he so faithfully served until the end.

HANS SUNDSTROM, member of the Swedish Engineers' Society since 1909, died October 26, 1918, in Norrköping, Sweden.

Born in Avesta, Sweden, Sept. 24, 1889, he received his education at the elementary school of that city. Later he left Sweden for America and became engaged as assistant chemist at the Universal Portland Cement Company, Buffington, Ind. Returning to Sweden a few years ago, he occupied at the time of his death an important position with Patent A.-B. Jungners Kali-Cement in Norrköping.

#### SVENSKA INGENIÖRS-FÖRENINGEN I FÖRENTA STATERNA The American Society of Swedish Engineers 271 Hicks Street, Brooklyn, New York

John Skogmark, ordförande; Axel S. Hedman, vice ordförande; H. Broms, sekreterare; C. A. Frissell, skattmästare.

Föreningen grundlagd den 11 febr. 1888. För närvarande 318 medlemmar.

## SVENSKA INGENIÖRS-FÖRENINGEN I CHICAGO The Swedish Engineers' Society of Chicago

619-620 City Hall Square Building, 139 North Clark Street, Chicago, Illinois

Clarence S. Ongman, ordförande; Carl F. Anderson, vice ordförande; C. H. Mayer, sekreterare; A. K. Sjolander, skattmästare.

Föreningen grundlagd den 10 oktober 1908. För närvarande 304 medlemmar.

#### THE SWEDISH HISTORICAL SOCIETY OF AMERICA

(Founded 1905)

- AIMS-1. To collect a central library of books, papers and manuscripts written by, or relating to Swedish-Americans; also works on the history, culture and literature of Sweden.
  - 2. To issue publications relating to the Swedish people in America.
  - 3. To encourage and promote the study of Swedish literature and history in American universities and colleges.
- DONATIONS-Gifts to the library should be addressed to Mr. Marcus Skarstedt, Public Library, Evanston, Illinois.
- MEMBERSHIP-Any person who desires to aid in furthering the work of the Society may become a member by remitting the annual fee of \$2.00 to the Recording Secretary, Mr. Marcus Skarstedt, Public Library, Evanston, Illinois, or to the Treasurer, Mr. E. E. Freeman, 2701 Lincoln Ave., Chicago Illinois.

Edward C. Westman President; N. A. Nelson, Vice President; Marcus Skarstedt, Recording Secretary; Wm. F. Carlson, Corresponding Secretary; E. E. Freeman, Treasurer; C. G. Wallenius, Librarian.

The library of the Society is located in the building of the Denkmann Memorial Library, Rock Island, Illinois.

#### JOHN CRERAR LIBRARY, CHICAGO, ILL.

Scientific reference library. All technical literature in the English and foreign languages. Open free to the public from 9 o'clock in the morning until 10 o'clock in the evening. Located on the 6th floor of Marshall Field Building, entrance on Wabash Ave.

#### PUBLIC LIBRARY, CHICAGO, ILL.

Michigan Avenue, Washington and Randolph Streets. Reference Room for United States Patent Office, entrance from Randolph Street.

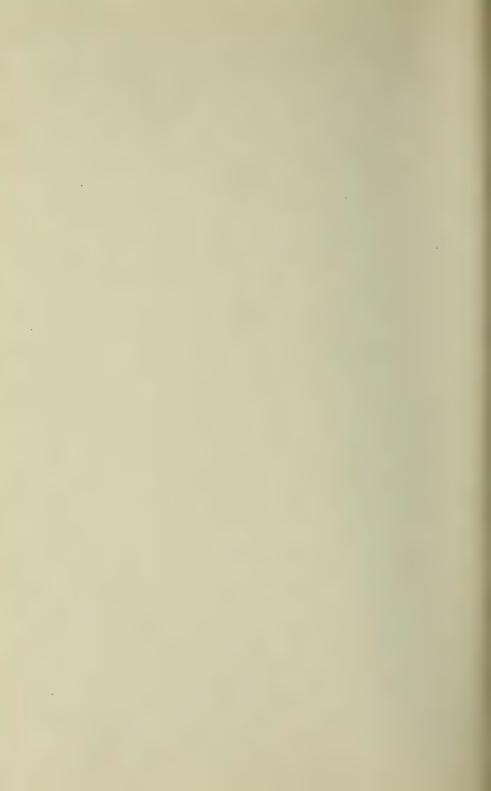
#### SVENSKA KLUBBEN 1258 North La Salle Street, Chicago

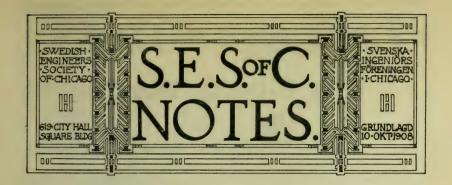
Alex. J. Johnson, President; Ivar Holmstrom, Vice President; C. G. Axell, Secretary; K. A. Warner, Treasurer; R. C. Ostergren, Librarian.

Board of Directors—John Ericson, Max Hedman, C. S. Peterson, John S. Meck, B. O. Larson, Martin Maurd.

#### SVITHIOD SINGING CLUB 624 Wrightwood Avenue, Chicago

John P. Friedlund, President; Hermann Olson, Vice President; Albert Kellberg, Recording Secretary; Hjalmar Olson, Financial Secretary; John Abrahamson, Treasurer. Board of Directors-John E. Ericsson, Dr. Theo. Lundquist, C. G. Axell, Eric Davis, Arvid Washberg.





CHICAGO, ILL., APRIL, 1918.

# The Swedish Engineers' Society of Chicago

will hold its next meeting at the Svithiod Singing Club, 624 Wrightwood Avenue, Saturday, April 27, 1918, 8:00 P. M. The Board of Directors meet at 7:00 P. M.

#### "THE EVOLUTION OF THE GRINDING MACHINE"

will be the subject of the lecture to be given by Mr. H. W. Dunbar of the Norton Grinding Company. The lecture will be illustrated with stereopticon slides, and will prove of great interest to ALL of the members. Do come, and bring as many of your friends as you care! Everybody is welcome!

The House Committee will arrange for a good supper as usual. As the "Good Old Summer Time" will be with us soon, every member ought to come to the meetings, while the weather is such as to make an indoor meeting a pleasure.

#### NEW MEMBERS.

C. G. N. Ofverberg, 111 Austin Street, Cambridge, Mass., Corresp. Member.S. D. Rydstedt, 3004 Blaine Place, Chicago, Ill., Active Member.

#### PUBLICATION COMMITTEE.

V. NICHOLSON, Chairman

F. SEABERG A. AKERS

H. E. WESTERBERG C. S. ONGMAN

J. ABRAHAMSON



# **Buy Liberty Bonds**

The Kaiser and his horde of soldiers have set out to destroy the Allied army and make peace on their own terms.

At a terrific cost of life they have succeeded in bending back the western front, but at no point have they been able to effect a breach owing to the courage, skill and tenacity of the soldiers fighting for the cause of liberty and democracy. While this desirable result has been reached for the Allies there is no doubt that it was at the expense of serious losses on their side, and while reports show that the soldiers are tired still it is generally conceded that with a little encouragement they will be as determined as ever that the cause of freedom and justice shall not perish from the earth.

In this great war where whole peoples are at war with each other, the soldiers or fighters constitute the first line of defense and the non-combatants form a branch hardly less important to the successful prosecution of the war. It is generally conceded that the debacles on the Russian and Italian fronts would not have taken place had the non-combatant branch been kept at a proper state of patriotism and efficiency.

Let us who are members of this second great class encourage our fighters "over there" by doing not our bit but our utmost that they may have all the sinews necessary to the successful prosecution of the war.

May we Americans of Swedish descent live up to the noble traditions of our race by always doing our duty toward the land of our birth or adoption, and may it not be said of us when the drive for the Third Liberty Loan is completed that we shirked. To those not as yet citizens of this great country it should not require a great stretch of imagination to see that the cause and future of the small neutral countries is bound up in the cause of the Associated Powers, for basing our opinion on the illegal act which Germany did when she invaded Belgium, it can be easily seen that she would disregard any treaty she would have with these neutrals, should it suit her purpose to do so.

May every man in the Swedish Engineers' Society who can possibly do so, subscribe for one or more bonds of the Third Liberty Loan.

It is better to buy bonds during the war than indemnity after peace is declared.

Bonds can be obtained in any desired denomination from your banker.

V. N.



### Our Roll of Honor

Chicago, April, 1918.

Messrs. A. CEDEROTH,

O. NELSON,

C. E. RANG.

Dear Fellow Members—Battles are now raging on the European theater of war, the outcome of which will determine the destinies of nations.

America is in the war to exterminate once for all the threatening domination by military despots of the affairs of the world. It is a fight against great odds for the associated powers, but the ultimate outcome can not be but one—a complete victory for the United States and the Allies.

The Society is proud to have three of its Chicago members on its roll of honor, and it is beyond a doubt that the courage and determination possessed by our ancestors under Gustaf II Adolf and Karl XII also will be displayed by you, and that the deeds of men of Swedish descent in former U. S. wars will animate you to great sacrifices for the cause of our country.

At the Society's Annual Banquet and Ball a collection was made for a "SMOKE AND RECREATION FUND FOR MEMBERS OF THE S. E. S. OF CHICAGO IN THE U. S. MILITARY SERVICE," the total of which amounted to \$37.50.

The Society herewith sends each one of you your share of said fund with the very best wishes and the assurance of everlasting interest in your welfare.

Yours fraternally,

J. ABRAHAMSON, Secretary.

### A Century Club

The Membership Committee have organized their forces for a campaign for new members and hope it will be well received and supported by our Society. We have received some answers to our appeal for cooperation, and trust everyone will feel it not only his duty but his privilege as well, to put his shoulder to the wheel and plug for members. We need at least 100 good energetic new members who will not only join our Society this year, but who will enter into the work with heart and soul. In other words. Live wires that will make things hum.

We are organizing a Century Club. We want 20 members to join at once. Each one of whom will pledge himself to bring in five new members this year. Will you be one of the pushers in our Century Club? If you have not yet received a letter on this subject you will shortly. Please respond. Any suggestions the members may have which they think will be of benefit to our committee, please feel free to offer them. Address communications to Chairman of Membership Committee, Room 619, City Hall Square Building.

#### Vanadium-Sweden-Steel

In the Swedish Foreign Trade Journal, Nos. 3 and 4, 1917, recently received, there appear a number of interesting articles relative to the Swedish industry and finance.

SWEDISH COAL AND VANADIUM DEPOSITS, is the title of an article in which a detailed account has been given of discoveries of great importance for the Swedish steel industry.

The fact is that vanadium carrying coal deposits were discovered as early as in 1907 on Billingen in Västergötland, but not until recently had any mining work been undertaken.

Now, however, a syndicate has been formed to exploit these deposits. According to carefully made calculations the mine may be expected to yield about 10,000 tons of coal per annum. This amount is of small significance as far as Sweden's total requirements of coal are concerned, and the discovery would be of little or no value, if not the fact, that the ashes from the coal, amounting to about 1 per cent, contained 40 to 50 per cent of vanadic acid, was the determining factor for the presumably remunerative mining of the deposits. Thus, according to recent estimates, there will be obtained about 2 kg. of vanadium per ton coal, or an annual output of 20 tons. As the world's total production of vanadium has been estimated from 135 to 200 tons annually the real importance of the discovery can readily be seen.

### **Thumbtacks**

What has become of our ex-presidents? They never show up at the meetings any more. Come once in a while anyway!

\* \* \*

Our musical friend Charles Bolin has left the "Wild and Wooly" and gone east. We take for granted that he is exploring the "Great White Way" every evening to make up for lost time.

\* \* \*

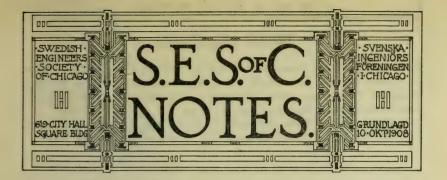
Our Chauncey Depew has put his senatorial aspirations on the shelf and is learning something "worth while." He is going to become a "tool maker."

\* \* \*

Our literary friend Astolf Levin has paid Chicago a visit. "O'est LaFemme."

茶 杂 芳

We sincerely wish that next time Mr. Wern comes to Chicago he tries to arrange his coming on our meeting day. We all like to see him.



CHICAGO, ILL., MAY, 1918.

## Regular Meeting

will be held at the

#### SVITHIOD SINGING CLUB

624 Wrightwood Avenue

# Saturday, Evening, May 18, 1918 at 7 o'clock, sharp

A very interesting lecture will be delivered by Mr. W. Stuart Tait, Vice President and Chief Engineer, Tait Engineering Co., on Reinforced Concrete. In these days when structural steel shapes for building construction is almost impossible to obtain and the cost of steel is sky high, this subject should be of more than usual interest to us all. Let us turn out in great number and hear Mr. Tait, who is an authority on this subject.

Note that the meeting will begin at 7 o'clock, as Mr. Tait wants to leave early.

After the meeting a "Sexa" will be served as usual. Our President has obtained the promise of the Chicago Quartet to be present at this meeting and favor us with their talented selections.

## **Board of Directors Meeting**

will be held at Svithiod Singing Club, Thursday Evening, May 16, at 6:30 o'clock

The change of time for this meeting was agreed upon by the Board so as to be able to begin our regular meeting promptly at time stated, which we regret to say we have not in the past. We hope that by this change the "Sexa" will be served in such a time that all members can stay and enjoy the evening and still get home before the roosters crow.

#### **New Members**

L. H. Bergman, 452 Monadnock Building, Chicago, III. Active Member. J. W. Lauren, 452 Monadnock Building, Chicago, III. Active Member. Thure W. Ingemanson, 5840 Chicago Ave., Chicago, III. Active Member. Nels Nelson, 6601 Minerva Ave., Chicago, III. Active Member. C. Hj. Nyström, 440 South Dearborn Street, Chicago, III. Active Member. John R. Waessman, 6119 Kenwood Ave., Chicago, III. Active Member.

## Resigned

Walter H. Ericsson,

Axel Hawkinson,

Eric R. Lundgren.

### Dropped for Non-payment of Dues

Nils Adler, Alfons Ahnger, Gustaf Alsterberg, Oscar Burklund, C. Th. Carlson, Ivar Ericson, P. A. Edquist, E. S. Johnson, E. G. Larson, Victor Malmgren, Helge Nassen, Rudolf Poitzel, C. E. Olson, Ernest M. Olson, K. E. Ramsten, Gustaf E. Robertson, Chas. G. Strombegr.

(Dropped active members will kindly return their keys.)

### The Century Club

The response to the letter sent out by the Membership Committee, soliciting timber for our Century Club, has been very good so far. If applicants keep up we will soon have the requested 20, and then we can go to work with a vim. Already several applications for membership in our S. E. S. have been placed on file, and we are very sanguine of the future. If each one puts his shoulder to the wheel we will more than attain our objective—100 new members this year. Wake up, everybody. Be a live wire and help the good work along.

### Our Secretary Joins The Colors

Our Society has been called upon to make a great sacrifice for Uncle Sam, and we do it gladly. We refer to the enlistment of our Secretary, Mr. Abrahamson. He joins the colors in France very soon, and it is needless to say his absence will be deeply felt by us all. He has been a hustler and a worker from start to finish. And now that he feels the call to serve his adopted country in our great struggle for World Freedom, we wish him Godspeed, and good luck "over there." We shall miss him here at home. Welcome back, when your work is finished across the seas-

## The Housing Question

During past years our members have repeatedly expressed their desire of obtaining better headquarters, and this has been made with the fullest justice.

Our Society is constantly growing in membership, and this year will without doubt be the banner year, if the present rate of new members is kept up,—even if a few names of old members must be dropped from the rolls on account of non-payment of dues. We are looking for continued progress and to grow larger right along. However, this progress can not go forward with the wishes for speed as long as we do not have an office or place to go to or meet at where we may feel undisturbed or at home.

Imagine an engineer coming into our present 2x4 office to do some studying or to look up certain data from the library or to read a paper or magazine, and upon entering finds half a dozen of his colleagues sitting there with feet on the table and conversing with loud voices somewhere in the thick clouds of cigar smoke. Is he going to hang up his hat and stay or will he leave with intention of returning later? Very likely he will leave and come back some other day—only to find the same condition. After this has been repeated a few times he will stay away altogether and also be absent from the meetings.

To avoid just this, better and roomier quarters should be provided for, to house our library and reading matter, and for storing away back numbers of magazines, etc., all of which should be separate from the office.

Such an improvement must naturally be connected with extra expense to the Society, compared to the present. The Housing Committee can not see a way open to accomplish this so much desired change without paying a higher price in rent. Our treasury cannot be drawn upon any heavier for current expenses as long as the present membership dues remain.

Can the dues be raised and the membership still be maintained? What do you as a member suggest?

This question will be brought before the Society at this meeting, and it is to the interest of every member to be present and express his opinion. Please attend.

Let us work together and for greater success.

Camp Logan, Texas, April 26, 1918.

Swedish Engineers' Society of Chicago,

619 City Hall Square Building,

Chicago, Illinois.

Gentlemen:—I beg to acknowledge receipt of your inspiring letter and the check which you so kindly sent me.

I wish to assure you that my thoughts are always with you, and it is with the happy knowledge of being one among the representatives of an old race "that could fall but never retreat," I am now ready to leave for the big hunt.

With best wishes to all the fellow members, I am,

Respectfully yours,

AL. CEDEROTH,

Co. A-122, M. G. B-n, Camp Logan, Houston, Texas.

### War Savings Stamps

The drive for the Third Liberty Loan is over, and as a result of the general and united effort of the American people, this Loan has been greatly oversubscribed. Among all the races making up our cosmopolitan nation, the Swedes were among the top ones in the matter of Liberty Bonds per capita, and all reports indicate that the members of the S. E. S. did their duty and "Went Over the Top."

While it is a glorious thing to attain such desirable results on our bond issues, the government has deemed it advisable to inaugurate a plan enabling the people to invest their money in the government at all times, regardless of the Liberty Loans, and now sells War Savings Stamps.

This form of savings is not supposed to be in competition with the bonds, but supplementary to them, and is intended to take up the slack and wastage in our economic system. This slack and wastage is declared to be so great that the loss daily through this means would pay the daily cost of the War.

While encouraging children to purchase these stamps is an excellent way of teaching them thrift, still we should not allow the erroneous impression to prevail that they are only for children and people not able to buy Liberty Bonds, for they are supposed to be used by all people, regardless of their circumstances, financially or otherwise.

The more realized in this manner, the less will be required on the big Liberty Loans, and with the increasing popularity of this form of investment it is believed that eventually the entire financing of the War can be done by this means.

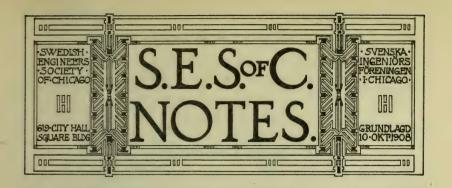
The week of May 12th to 18th inclusive will be War Savings Pledge Week, when a canvass will be made for pledges of a stated amount per week or month for savings stamps for the remainder of the year. The goal set for this year in the whole United States is \$2,000,000,000, to be collected by this means. Chicago's quota is \$56,000,000.

I am sure members of the S. E. S. will do their duty in this regard as they did toward the Third Liberty Loan, for as a nation the Swedes have been imbued with the spirit of thrift since childhood.

Stamps are obtained in 25 cent denominations from schools, mail carriers, post-offices and banks.

V. N.





CHICAGO, ILL., JUNE, 1918.

## The June Regular Meeting

will be held at Svithiod Singing Club, 624 Wrightwood Ave., Saturday evening, June 29th, at 8 o'clock sharp. Our fellow member and Vice President, Mr. Victor Nicholson, will talk on "The Vehicle Tax of Chicago." "Kräft-sexa" after the meeting. This being the last meeting for this season, it is hoped that as many members as possible will attend and make it a grand final.

## **Board of Directors Meeting**

will be held at Svithiod Singing Club Thursday evening, June 27th, at 6:30 o'clock. All officers and Board of Directors are requested to appear at this meeting.

### New Members

Edwin A. Olson, 3030 Sheridan Road, Chicago. Associate Member. Eric Edwin Westman, 720 N. Illinois St., Indianapolis, Ind. Corr.' Member. Ernest Hedenskog, Muskegon Mich. Corresponding Member. Harold Werme, 626 N. La Salle St., Indianapolis, Ind. Corresp. Member. David Christianson, 1020 Leland Ave., Chicago. Active Member. Carl August Sundstrom, 6042 Michigan Ave., Chicago. Active Member. Thure Elon Johnson, 7432 Lawrence Ave., Chicago. Active Member. G. A. Granlund, Monarch Machine Tool Co., Sidney, Ohio. Corr. Member.

### Joined the Colors

S. G. Goranson,

L. G. Waessman.

### A Patriotic Demonstration

by the Swedes of Chicago will be held in Lincoln Park Thursday, July 4th, at 3 P. M. It is hoped that all members of the S. E. S. will turn out and show their colors.

#### A War Committee

The Western Society of Engineers has extended to the leading Engineering Societies in Chicago an invitation to take part in organizing a war committee to handle the technical problems arising in this locality in connection with the war. The above mentioned society having had requests from several national war organizations for assistance in solving these problems, rightly recognized the fact that in order to obtain the best results, the various technical interests of Chicago should be enlisted. The Swedish Engineers' Society of Chicago is among the eighteen technical societies invited for representation on this committee and has been represented at the two meetings recently held.

The importance of this War Committee should not be underestimated. The object of this organization is briefly, as stated in section 2, Governing

Rules, and reads as follows:

'The purpose of the War Committee shall be to enable the Technical Societies of the Chicago zone to call into play the efforts of the members of the various societies herein represented, as occasion may arise, and to co-ordinate their activities into the most effectual channels to help win the war."

It is also proposed that in order to make this committee's work more efficient, that each society represented organizes its own war committee which will work in close co-operation with the main committee. The Swedish Engineers' Society, whose members are whole-hearted back of our government in its efforts to make the world safe for democracy, should render all possible assistance to this war committee, and it should be our duty to show once more, the ability of the Swedish engineer.

This very important question will be up for discussion at our next meeting and it should be to all our interests to attend and partake.

C. H. M.

## The Convention of the American Association of Engineers jointly with the Committee on Engineering Co-operation

The above convention was held at the City Club here in Chicago, May 14th, 1918, and was attended by a representation of delegates from the S. E. S.

This was an extraordinary meeting of representatives of the engineering profession gathered from over sixty engineering societies all over this country. It was one of the most important gatherings ever held in this country for the purpose of raising the status of the engineering profession in the United States.

It has been recognized by thoughtful members of our profession in the past five years that they have not been reaping the benefits or recognition that the service rendered by them warrant and it is for the purpose of gaining these ends that this convention was held. This association has set its aim on placing the engineer on the same high plane as the doctor or lawyer. It is realized, of course, that this desirable result cannot be obtained immediately, but it is believed that with wise policies and legislation, both State and National, that this condition will be eventually brought about.

Before anything can be done toward reaching this result the term or title Engineer must de defined. As there are many opinions as to the requirements for an engineer it may take a few years before the engineering profession is placed where it is and should be in some of the European countries. However, with the characteristic persistency of the American engineer the name or title Engineer will eventually mean something, both monetarily and in the field of profession.

To us Americans of Swedish extraction this aim set by this association should appeal most satisfactorily for in the country from which we originated or from which our ancestors came, to be Engineer means something. As one of the delegates from the S. E. S., I feel that the society of which we are all members should continue to co-operate with the American Association of Engineers, for it is only through co-operation

that large bodies of men obtain that for which they seek.

As to the convention, I was struck by the high character and standing of the men present. There were past presidents of several of the large engineering societies present and actively interested in this work, which goes to show that this important work is in capable hands. The S. E. S. should feel complimented in that the keys of the city and welcoming address was delivered by our esteemed past president, City Engineer John Ericson.

The association did all in their power to co-operate in helping Uncle Sam win the war, and through their efforts changed the pernicious habit of hiring engineers through private employment agencies so that they are now always employed through the Government Employment Agencies or by the United States Civil Service Commission, thus saving to the engineer the fee he formerly had to pay to private employment agencies.

There were many other matters taken up, but space will not permit

reciting any more.

Being held only one day, all the work was done in committee, and their reports considered hastily in the meeting as a whole.

Taken as a whole it was one of the most interesting and important conventions I have ever attended.

V. NICHOLSON.

## Letter from Ex-secretary

Jefferson Barracks, Mo., June 9, 1918.

Dear M .--

According to my promise of a week ago I will take the opportunity of a leisure Sunday afternoon to write and let the "boys" and not the least yourself know, that I am well and everything O. K.

As you presumably are aware, Jefferson Barracks is only an outfitting depot, where thousands of men are made soldiers (as far as appearance goes) every day, and not as some people might think, a training camp.

The men, enlisted as well as selected, come here, are examined physically as well as mentally, and receive their soldier outfit, all in one day. It is a wonderfully well worked out system without a flaw in it. During the month of May not less than 30,000 men were thus handled, and since the outbreak of hostilities 150,000.

We are a few men down here, tradesmen, civil engineers, chemists and other professionals, who are detained until suitable assignments can be made. The length of our stay at the reservation is very uncertain. Some may be shipped away tomorrow and others not in weeks to follow.

Do not think, however, for a minute, that our days are spent leisurely. Not by any means. Drillings, occasional inspections and examinations (inoculations) take most of our time. And if it doesn't, we are given "fatigue," consisting of wood chopping, grass-cutting and other interesting pastimes, suitable for doctors, lawyers, publicity men and engineers. It sounds perhaps as if I was "kicking," but that is not the case, on the contrary we so-called "special service men" all enjoy it heartily; and besides, it gives a wonderful appetite.

Another of the "S. E. S. boys" is down here, our friend George Waessman, and with the exception of more or less imagined "stomach troubles"

he is doing well.

I am studying French occasionally and here is an example.

Au revoir,

O. E. J. ABRAHAMSON.

### Thumbtacks

We predict an early peace, owing to the fact that our Secretray has joined Uncle Sam's forces, he is going to make gas for the Huns.

\* \* \*

Our friend Hugo "lost his calling," he should have been a lawyer; can't you picture him saying, "I object, your honor."

\* \* \*

George has had a letter from the "Great Beyond." Bergquist wrote him from Philadelphia.

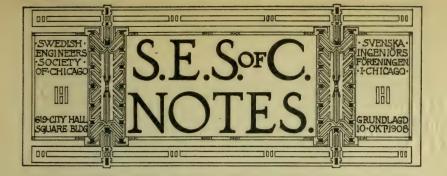
\* \* \*

If the Kaiser needs anybody to collect the indemnity he expects to get, we suggest he get in touch with our Treasurer, he will make them come across.

\* \* \*

Our versatile Emil Lindberg must be a man "with a past." At a recent banquet a request was made that all men having sons in the U. S. Army, please arise. Emil was one of the very first to arise, which of course set us thinking. We sincerely hope that he is able to make a satisfactory explanation to the boys.





CHICAGO, ILL., NOVEMBER, 1918.

## Regular Meeting

of the

## Swedish Engineers' Society of Chicago

will be held at

## The Swedish Club

1258 N. La Salle Street

Saturday, November 23rd, 1918, at 8 o'clock

Lecture by Mr. A. K. Sjolander

Engineer at the Link Belt Co.

Subject: "Conveying and Elevating Machinery"

## SEXA

The Board of Directors will meet just before the opening of the regular meeting.

The lecturer for this meeting, our fellow member and Treasurer, Mr. A. K. Sjolander, who for the last 12 years has been connected with the Link Belt Co., will describe and illustrate by lantern slides the different types and construction of modern conveying and elevating machinery. Being thoroughly posted on his subject, we are assured of a very interesting and instructive evening.

### **NEW MEMBERS**

Frey L. Broberg, 906 Winona St.—Active Member.
Nels Schoen, 6349 South Honore St.—Active Member.
Emil A. Stolnacker, 300 W. 112th St.—Active Member.
Thomas Hagelthorn, 904 Winona St.—Active Member.
J. Hilding Johnston, 6417 So. Artesian Ave.—Active Member.
Nils Fredrick Resare, 2330 W. 115th St.—Active Member.
Erik Gustaf Grundstrom, 1709 W. 64th St.—Active Member.
Brynolf Lundquist, 4419 N. Lincoln St.—Active Member.
August Jette, 1454 Argyle St.—Active Member.
Johannes G. A. Strandell, 6935 So. Laffin St.—Active Member.
Emil Johnsson, 844 Grace St.—Active Member.
Sidney Thor Sjoberg, 918 Waveland Ave.—Active Member.
Axel Ferdinand Elmzen, 3rd & Calhoun Sts., Peru, Ill.—Corr'g Member.
Charles E. Ericsson, 48 Lexington Ave., New York, N. Y.—Corresponding Member.

### **RESIGNED**

B. O. Pallin-Corresponding Member.

## The Tenth Anniversary of Our Society

celebrated October 12th at the Swedish Club, was attended by approximately eighty of the Society's members, ladies and friends, and proved to be a grand success. Owing to the influenza epidemic the dance schedule for the evening was cancelled, which, however, did not make the evening less enjoyable. The spirit gradually increased during the patriotic speech by our Orator, Mr. Parke, who had picked for his subject "Our Country," and the instructive remarks by Mr. E. J. Ericsson on "Our Society," and when finally our well-known member, Mr. Ongman, delivered his speech on "Our Ladies," the enthusiasm reached it's climax. Music was generously furnished by the Chicago Quartette and a selected orchestra.

Many telegrams were received from various members.

The following telegram was sent to the Swedish Minister in Washington, W. A. F. Ekengren, October 12th, 1918:

"The Swedish Engineers' Society of Chicago, assembled in celebration of it's tenth anniversary, sends it's hearty greeting in commemoration of your presence at the first Swedish Engineering Convention in Chicago, September, 1915.

(Signed)

JOHN E. ERICSSON, President. C. H. MAYER, Secretary."

In reply the Swedish Consulate of Chicago received the following telegram, dated October 13th, 1918:

"Please present to Mr. John E. Ericsson, President, and Mr. C. H. Mayer, Secretary, of the Swedish Engineers' Society, my heartiest thanks for their very kind greetings. My visit to Chicago as the guest of the Swedish Engineering Convention nineteen fifteen, shall always remain to me one of the most pleasant memories. May the Swedish Engineers' Society of Chicago ever prosper.

W. A. EKENGREN, Minister of Sweden."

## The Century Club

Up to date the Century Club has made good progress in spite of conditions which have prevailed to hamper our activities. New members have been added to our Society in goodly numbers, and the material has been of the best: men who will be a credit to our Society.

But let us not be satisfied with what has been accomplished, but may it only spur us on to renewed efforts, so we may reach the end of 1918 in a whirlwind finish. Each one put his shoulder to the wheel and give one

grand and glorious push.

### A Contribution to the Valuation of Men

By H. EM. WESTERBERG.

It is said our time is characterized by the surrounding interest in industrial work along material lines. It is claimed the making, distribution and selling of things nowadays engages the best brains amongst our contemporaries. Whether this is a result or cause may be considered of minor importance.

It is said, the superior abilities who formerly were leaders in warfare, in building up of nations through conquest, now as captains of industry have injected "the Art of Efficiency" into the making of nature's riches available to the masses and therefore our age is mainly distinguished as the age of "Productive Industry."

On occasion, however, this does not seem to be so. The war has made clear that in no country were the right men at the head of the different departments tested. In England, the twin glories of which have been its navy and its trade, it was soon found necessary to eliminate the chiefs and organization in force and replace them with others of different type. France, whose army was its pet child, and whose political condition the triumph of democracy, had to get rid of prominent men placed in the highest offices in times of peace. In Germany the two leaders who became responsible for her temporary success, were practically at the end of their careers and far from the top, when the proofs of superiority in their callings were to be delivered. They received their promotions, when the chosen ones had fallen by the wayside as inefficient. And finally the basic principles of modern warfare by friends and foes alike seen in the Prussian military system, were overthrown by another set of theories acted upon by the conqueror, who had preached them during the larger part of his life, and had failed to get them accepted until the last hour.

Sometimes, however, affairs seem to be handled with dispatch. Witness the different war activities again. Flying machines have improved wonderfully; submarines have become wonders of mechanical perfection, transportation has grown in power and endurance until with the same equipment it takes care of many times its previous tonnage; the output of factories and shops has multiplied until it fills demands never even dreamed of.

For an explanation of such experiences it is necessary to go to that new congenial science, psychology. Laboratory students thereof have found the characteristic relationship of the separate senses to consciousness. Granting that being conscious is being alive, the extent and nature of living is dependent on the extent and nature of the senses or rather of their reaction on the mind, the feelings.

The first sense developed in a child is that of touch. The second is that of sound, and the last that of sight. These are the most important

ones for carrying on an occupation, which a man has for subsistence. Chance and the inherent physical and mental qualities decide which particular occupation will be selected, and as they make different demands on the senses these will be responded to and thus the nature of the action of man will divide them in classes according to which one sense is mainly used.

The laborer, for instance, does not need more than the sense of touch to be busy about his calling. Given a pick and shovel or the material for a basket, he will begin to produce even if deaf and blind. The movement of his body and limbs will connect one moment of his consciousness to the next through touch and memory, and repeated soon will reach a maximum of result from a minimum of effort, that is efficiency on level with that of a man who can see and hear.

Suppose another man, one with the sense of hearing in addition, is used for the same work. His instructions can be much more complicated and therefore his task more extended because he also has the memory of sound. He can be told to stop a certain kind of movement after a certain time and start in another direction and thus soon has included the time element in his connection to an outside world.

Again suppose a third man, this one with the use of sight to complete his gifts, is put on the same job. He is able to execute his work, that part requiring a touch memory and the part requiring a sound memory, and he also can keep track of the other fellows. His ability to see makes it possible to transfer to him the supervision of others.

Thus naturally three classes present themselves, based on the kind of memory they make use of to carry out their tasks. They are the laborer using touch memory; the professional using sound memory and the organizer using sight memory.

Besides the combined talents of these memory workers, in a few individuals is found another, imagination, which, by the way, is the first real distinction between man and animal. The organizer has the ability to change chaos into order, to arrange men and matters in a suitable way for a set purpose, but the initiative, if it is one of reason and not feeling, has to come to him from the outside. This initiative, this idea of something definite that ought to be done to improve things, is the part the inventor contributes to the world's work. He seems to have the creative mind in addition to the relative one of the other classes.

Above these four we sometimes suspicion the existence of a singular occupation, that of the philosopher, but his connection with the practical world is too distant to concern anyone now.

### THUMB TACKS

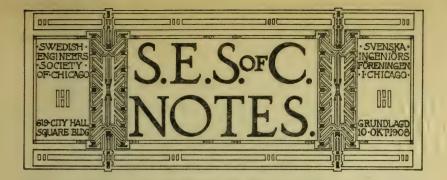
The unexpected has happened? George Axell has moved!

Sergeant Oscar Nelson of the U.S. Ordnance Department, paid us a visit. He likes to work for Uncle Sam.

Greatest Indoor Sport? See Ruben Fogel, he will tell you.

What has become of Save? Has he evaporated; he has not been

seen for a long while.



CHICAGO, ILL., DECEMBER, 1918.

## The Next Regular Meeting

will be held at

## Svithiod Singing Club

624 Wrightwood Avenue

Saturday, December 14th, 1918, at 8 P. M.

# BUSINESS MEETING AND ELECTION SEXA

#### BOARD OF DIRECTORS MEETING

will be held at Svithiod Singing Club, Wednesday evening, December 11th, 1918, at 6:30 P. M. It is to be hoped that all officers and members of the Board of Directors will be present at this meeting.

### **NEW MEMBERS**

Oscar B. Norgren, 3143 Eastwood Ave., Chicago, Active Member.
Conrad D. Youngberg, 1466 Gregory St., Chicago, Active Member.
Charles Bostrom, 5254 Wayne Ave., Chicago, Active Member.
Albert A. W. Westin, 626 W. 61st St., Chicago, Active Member.
H. G. Anderson Tesch, Hotel McAlpine, New York, N. Y., Correspond-

ing Member. S. J. A. Wiebe, 570 44th St., Brooklyn, N. Y., Corresponding Member.

S. J. A. Wiebe, 570 44th St., Brooklyn, N. Y., Corresponding Member.

Charles B. Wallenius, 123 Beacon St., Hartford, Conn., Corresponding Member.

OF C. NOTES

## The Election Ballot as presented by the Nominating Committee is as follows:

PRESIDENT-(Vote for one) CLARENCE S. ONGMAN AXEL G. J. RAPP

VICE PRESIDENT-(Vote for one) C. E. CARSON CARL F. ANDERSON

SECRETARY-(Vote for one) C. H. MAYER GEORGE NANNFELDT

TREASURER-Vote for one) AXEL K. SJOLANDER J. P. FOGEL

BOARD OF DIRECTORS—(Vote for two) JOHN BRUNNER JOHN E. ERICSSON JOHN S. GULLBORG C. M. HEDMAN

### IMPORTANT NOTICE

Please note that election ballot reads: "Vote for three" Board of Directors. This should read "Vote for Two."

Return your ballot by mail, or still better, bring it to the December meeting in person, that evening being your last chance to vote for next year's officers.

## "With the Colors"

France, October 21st, 1918.

The Swedish Engineers' Society, Chicago, Ill. Dear Sirs and Members!

Your encouraging letter of July 11th received. It gives me a great deal of confidence and satisfaction to know that I am still with you in thought, and I wish to thank you all for the courtesies which you have extended to those of us in U. S. service. But most of all I appreciate what you are doing for the good and welfare of things in general at home.

No doubt but what most of you have registered by this time and are interested to proceed. I for one would be delighted to meet you over here. However, I hope that you may not have to come. As for myself, I am glad that I am here. Have had an interesting time of it since I joined the colors. Have been shifted around quite a bit and have had a chance at various performances. Attended the army school during the first two months after I landed in France, completed a course in aerial drafting and restitution. Am engaged along that line. Have seen quite a bit of France, and to me it is a very picturesque country, some very interesting characters and sights well worth remembering.

However, I am sure that the States will look good to all of us when we get back. We sure have some country. And I am inclined to think that conditions will be even better and competition more fair after this Hun drive is settled once and for all.

Regards and my best wishes for your progress and hoping to be with you again. Yours very truly,

> C. E. RANG. Detachment, Co. C, 29th Reg., Engineers, American E. F., France, A. P. O. 714.

### **Book Review**

Now that the war is over the lull that has existed in the technical book market will disappear and many new books will be published and sold. Many members of our Society, especially those who have benefitted by the war business, will have more money than they know what to do with, so will buy books.

Would it not be desirable if the Society could conduct a book review in short articles and publish them in our "Notes." It might prevent members from being stung in buying.

In this connection also it might be a good idea to give the names of new books published from month to month that might be of value to our membership.

V. N.

## A Contribution to the Valuation of Men

By H. EM. WESTERBERG.

(Continued from last issue.)

This division of human beings in five classes, according to the work they are doing and are fit for, gives a chance to study the peculiarities of individuals and their relationship to others. It should be noted that every healthy grown up man has to some degree the characteristics pertaining to classes outside his own. When speaking of a laborer in a certain field, it is understood that he mainly utilizes touch memory, which includes the memory of motion to accomplish his end. He may have all senses well developed, but one surpasses the others and its memory faculty is made even stronger by training. He finds in touch sensation the fullest expression of himself, his tendencies, wishes and longings, and is therefore happy when doing manual work. No matter where in society he is placed, if he is to feel the joy of life he has to be muscularly employed; as a lumberjack, prize fighter or a steeple chase rider, it does not make much difference which.

These five classes of men, three of which are distinguished by their physiological properties and the latter two by their mental qualities in addition, are to be found engaged very often in the same occupation. Thus we find amongst stone cutters laborers, who simply separate lapidarious structures into smaller parts suitable to be used later for different purposes such as building construction, road coverings, etc. Another stonecutter goes a step farther and hews according to instructions, printed or verbal, the raw material into many shaped corners and curves pleasing to the beholder. He is the professional of his trade, being in possession through the memory of sound, which works by means of symbols, words, of the experiences of others. That is, he has knowledge of a number of facts, pertaining to stone cutting in its advanced phases.

A third stonecutter, having the memory of sight, can perceive the differences in the works of a number of professionals and is enabled to judge their importance and therefor arrange them in proper order for a mass effect that neither the laborer nor the professional has felt necessary. He is the organizer of the various activities of his trade, as represented in knowledge and execution, but he has no clear conception of its purpose nor an instinct for its improvement.

The inventor amongst stonecutters finds new uses for stone, finds new processes for its treatment, new tools for its handling and in general carries the trade forward.

The philosopher in the stone cutting trade would analyze all causes and results of mental och physical work therein, outline moral laws and

principles governing it and establish the connection to other fields of human labor and its relative value for the ultimate purpose common to all beings.

One fact soon learned by observing the five types of men is that each one seems to know of the existence only of those below him and the nearest higher. Thus the laborer recognizes two classes, laborers and professionals. The professional man knows that on a lower plane is a fellow being, the laborer, and on a higher one the organizer. He does not understand the presence of inventors and philosophers nor even believes it possible that there can be men above the organizers. These last again are clearly aware of the existence of beings fundamentally different from themselves, and have no doubt about their relative positions.

Whenever a lower class member meets with a member of a class above the nearest higher he becomes frightened and therefore hostile, and thus we find the laborer invariably hating the organizer while he has all due respect for the professional. The professional in his turn admires the organizers and becomes furious at signs of the presence of inventors. Organizers simply ignore philosophers.

Each class below the inventor has arranged their social life in a very orderly way. The rights and duties of individuals are well outlined and justly carried into effect, wherever possible. If the world were only peopled with the three types, no progress would be possible, but on the other hand no discontent or sorrows. These are introduced by the inventors who have an unsuppressible desire to go forward, to develop and improve the state of conditions of whatever occupation happens to be theirs.

In doing this they introduce into a community which only understands and admits material property rights, new elements, ideas, which are considered any man's prey if he can acquire control of them. The organizer recognizing the value of the inventor's work is willing to exchange means for sustainance therefore. But here the professional steps in and objects. It is not the work of a man; it is sent by some unknown creator to advance the welfare of mankind, which only consists of the three lower classes. The person claiming the credit for an invention is an impostor and not entitled thereto. If he really has got it up it cannot be any good anyhow and it is no use wasting a loaf of bread on the idler. An idea is godsent alright and cannot be killed, and after a while it will be picked up like a wild berry in the woods and introduced into society as private property, gaining this exalted position through its ability to confer directly or indirectly material advantages; the property of a member of the lower classes who found it.

(To be continued.)

NOTE—In the first installment the following corrections should have been made:

Page 3, 1st line reads: the surrounding, should be: its surmounting. Page 3, 7th line from bottom reads: congenial, should be: empirical-Page 4, 11th line from top reads: touch and memory, should be: touch nemory.

4th line from bottom reads: relative, should be: retentive.

